



Cominco Ltd. 74th
Annual Report 1979

General Information

The Company

Cominco is a Canadian company, incorporated January 9, 1906, with international operations whose principal business is zinc, lead and chemical fertilizers. Its involvement is fully integrated and ranges from mineral exploration through mining, smelting, refining and by-product production to international marketing. It also embraces related services including trade, wharfage and power. With head office in Vancouver, it is involved, directly or through subsidiary or associated companies, in Canada and in the United States, Greenland, Europe, Australia, India and Japan.

Annual Meeting

Thursday, April 24, 1980
at 11:00 a.m.
Hotel Vancouver
Vancouver, B.C.

Share Valuation

For Canadian capital gain tax purposes the valuation day value of Cominco Ltd. shares on December 22, 1971 as established by the Department of National Revenue was \$22.88.

In this report:

Tonnage figures are in short tons unless otherwise noted.
Dollars are Canadian unless otherwise noted.

FRONT COVER

Top Left

Typical diamond drill set-up on an exploration project in southern British Columbia. In 1979, exploration for new deposits was largely concentrated in Canada, the United States, Australia and Europe.

Bottom Left

Flotation machines in the Sullivan concentrator. Lead and zinc are separated by differential flotation during the concentration process.

Top Right

Upper drill holes are bored by a twin-boom drill wagon preparatory to blasting in the newer sections of the Con gold mine.

Bottom Right

One of many beauty spots in the City of Trail, this park overlooks the metallurgical plants and the Columbia River.

Transfer Agents and Registrars

THE ROYAL TRUST COMPANY
555 Burrard Street,
Vancouver, B.C. V6B 3R7
600 - 7th Avenue S.W.,
Calgary, Alberta T2P 0Y6

*287 Broadway Avenue,
Winnipeg, Manitoba R3C 2M2
Toronto Dominion Centre,
Toronto, Ontario M5W 1P9

630 Dorchester Blvd. W.,
Montreal, Quebec H3B 1S6

**One King Street,
St. John, N.B. E2L 1G1

BANK OF MONTREAL
TRUST COMPANY

**2 Wall Street, New York, N.Y. 10005

STOCK EXCHANGES

CANADA
Vancouver, Montreal, Toronto
U.S.A.
**American

*Series A Preferred Shares only

**Common Shares only

Stock Holdings

The number of registered holdings of voting stock at the last dividend record date was 26,958

The distribution of the voting rights was as follows:

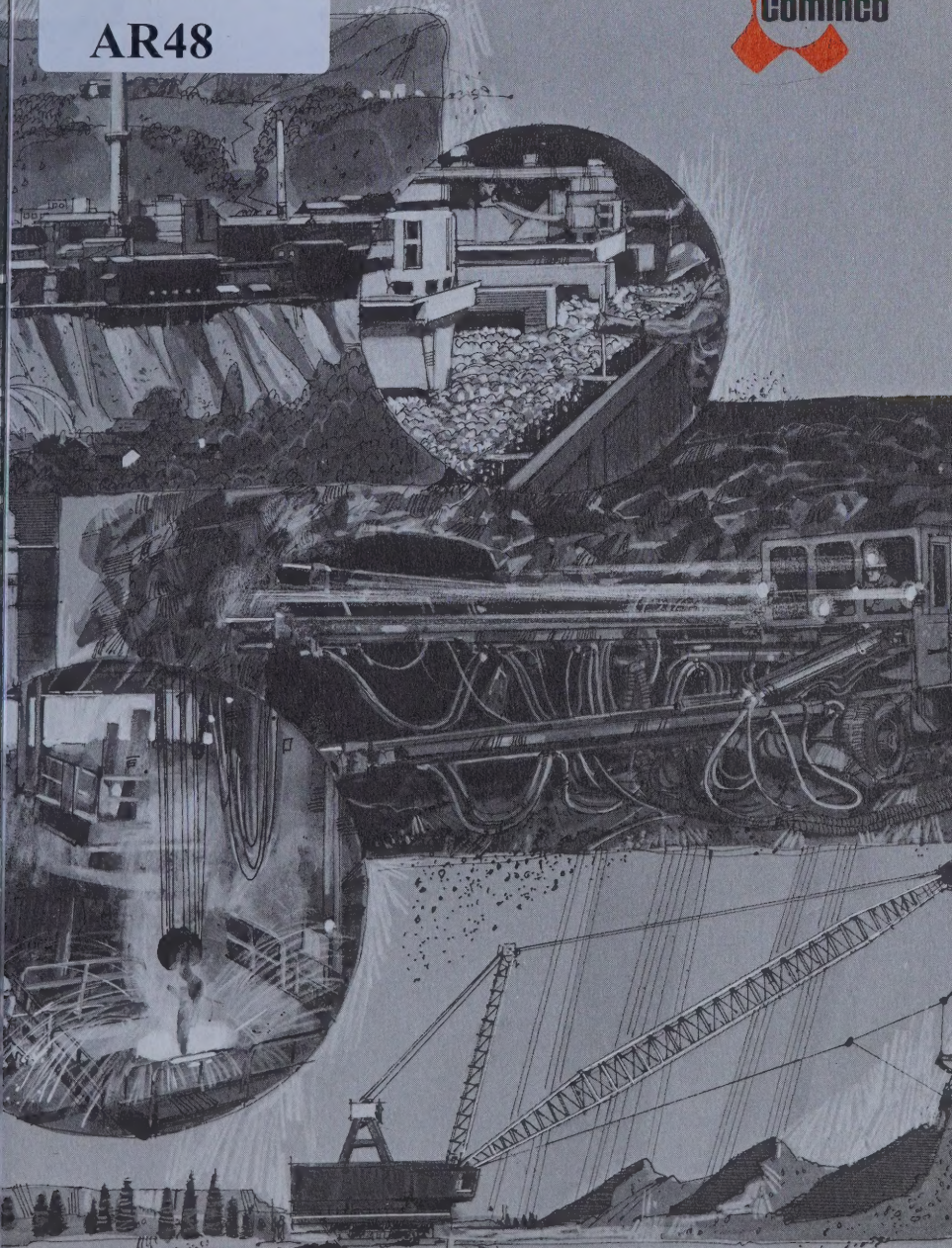
Canada	91.5%
United States	7.9%
United Kingdom	0.1%
Other countries	0.5%
	<hr/> 100.0%

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AR48





Cominco Ltd. First Quarter Results

M.N. Anderson, President and Chief Operating Officer, Cominco Ltd., announced on April 18, 1979 that unaudited consolidated net earnings for the three month period ended March 31, 1979 were \$38.3 million or \$2.14 per common share compared with \$9.5 million or \$0.49 per common share for the first quarter of 1978. Sales amounted to \$277 million compared with \$179 million last year.

Lead, zinc and silver sales volumes exceeded those of the same period last

year with strong demand permitting full operation of all facilities. Price improvements which started in the latter half of 1978 continued during the first quarter of 1979.

Fertilizer and potash sales increased significantly, partly due to customers requesting earlier shipment. Prices for these products have improved.

The Company's earnings from exports improved as a result of the lower value of the Canadian dollar compared to the same period last year.

Consolidated Statement of Earnings

(Unaudited)

	Three Months Ended March 31	
	1979	1978
	(thousands)	
Revenue		
Sales of products and services	\$277,000	\$179,200
Income from investments	2,700	1,400
	<u>\$279,700</u>	<u>\$180,600</u>
Earnings before the following	\$ 80,500	\$ 29,100
Depreciation, depletion and amortization	15,900	16,700
Income and resource taxes	24,400	5,700
Minority interest in net earnings of subsidiary companies	4,300	300
	<u>35,900</u>	<u>6,400</u>
Equity in net earnings of associated companies	2,100	2,500
Gain on translation of accounts of foreign subsidiaries	300	600
	<u>38,300</u>	<u>9,500</u>
Net earnings	\$ 38,300	\$ 9,500
Earnings per common share	\$2.14	\$0.49

Summary of the Proceedings at the Annual Meeting of Shareholders, Vancouver, B.C., April 19, 1979

Mr. G.H.D. Hobbs, Chairman of the Company, presided and Mr. P.C. Stewart, Secretary of the Company, recorded the proceedings. The Chairman welcomed the shareholders and guests and introduced the Officers on the platform and the Directors. The 126 shareholders present represented in person or by proxy 13,064,041 shares or 76.9% of voting rights attached to the issued common shares of the Company.

As a summary of the minutes of the last Annual Meeting was mailed to all shareholders, the formal reading of the minutes was waived. The Report of the Directors and the comparative consolidated financial statements of the Company for the year ended December 31, 1978, was tabled in accordance with the Canada Corporations Act.

The Directors elected to serve for two years, whose terms of office will expire at the Annual Meeting in 1981 are: W.J. Bennett, H.C. Bentall, R.W. Campbell, H.T. Fargey, R.A. MacKimmie, D.R. McMaster, P.A. Nepveu, I.D. Sinclair.

The Directors whose terms of office will expire at the Annual Meeting in 1980 are: M.N. Anderson, F.S. Burbidge, F.E. Burnet, G.H.D. Hobbs, S.E. Nixon, W.J. Stenason.

Messrs. Thorne Riddell & Co. were appointed auditors until the next Annual Meeting at a remuneration to be fixed by the Directors.

Question Period

During this period discussions were held on a number of subjects including:

Environmental regulations as they affect the Company and it's employees; the inadequacy of present accounting methods to capital intense industries during an inflationary period particularly those whose main activities are in mining

with major production facilities in place; the Company's continuing investment in Panarctic Oils Ltd. which has now been diluted to 8% by additional financing; and the potential for vertical integration of the Company's business which is under continual study.

Also, the Company was gratified to hear the expressed thanks from a shareholder pensioner for the recent voluntary increase in Company pension payments.

The Chairman's remarks and the President's report to the meeting together with the unaudited Comparative Consolidated Statement of Earnings for the three months ended March 31, 1979, form part of this report.

Following the shareholders' meeting, the directors held the organizational meeting.

The Senior Officers are: G.H.D. Hobbs, Chairman of the Company; M.N. Anderson, President and Chief Operating Officer; I.D. Sinclair, Vice-President; H.T. Fargey, Executive Vice-President at Toronto; W.G. Wilson, Executive Vice-President at Vancouver.

F.E. Burnet was elected Chairman of the Executive Committee. Members are: F.E. Burnet, M.N. Anderson, W.J. Bennett, F.S. Burbidge, H.T. Fargey, G.H.D. Hobbs, D.R. McMaster, I.D. Sinclair.

Audit Committee: S.E. Nixon*, H.C. Bentall, D.R. McMaster.

Special Committee: I.D. Sinclair*, W.J. Bennett, D.R. McMaster.

P.C. STEWART, Secretary
April 19, 1979

*Chairman of committee

**Remarks to the
Shareholders of Cominco Ltd.
by G.H.D. Hobbs, Chairman of the Company**



Later in the meeting, Norman Anderson, President of the Company, will review the operating highlights of 1978 and report on the significant developments which have occurred since the year-end, including the financial results for the first quarter.

In the meantime, and while we are waiting for the report of the scrutineers, I would like to comment briefly on the changing business climate and how it may affect Cominco.

The business climate is profoundly affected by the prevailing social and political influences. In recent years we have lived through a period of great social and political change, much of it brought about in response to vocal pressure groups. The influence of these partisan groups has had the effect of making the person on the street an instant but biased expert, not only on social and political matters, but economics as well. Governments all too frequently have acted in response to the clamour of these strident voices.

May I outline briefly some of the changes in our circumstances and attitudes which I believe will produce significant shifts in the business climate during the next few years.

It is often only in retrospect that we can recognize major and fundamental change. During the second world war, although we were too preoccupied to notice it, Canada changed from a basically agricultural to an industrial society.

For most of the postwar period until the O.P.E.C. oil price shock, the western world experienced a remarkable period of growth and prosperity, fueled by the continuous outpouring of U.S. dollars and the mounting deficits of many other countries.

These deficits caused huge increases in the world's money supply, giving the illusion of abundant wealth. This, in turn, reinforced that spurious doctrine of the politics of envy

which contends the poor are poor because the rich are rich.

The cry of the egalitarians was to take from the producers of wealth and give to the less fortunate and less productive. As a consequence, many of the western democracies, instead of encouraging the productive sectors to greater efforts, set about a massive redistribution of wealth in an attempt to "put things right".

With few exceptions, most of the Western industrialized countries undertook wealth redistribution at an excessive rate. As a result, inflation is rife, unemployment chronic, the value of currencies diminished and national deficits enormous.

On this continent, Canada led the way in redistribution of this seemingly endless supply of wealth, by creating an array of public programs of enormous continuing cost. Little thought was given to the cumulative burden these costs imposed on our economy.

Although unpleasant, the recession in the second half of the 1970's has precipitated a return to reality. Once again, we are face to face with an inescapable fact of economics. If we want more, we must produce more. I am encouraged by the growing public recognition that real social progress must be preceded by real economic growth.

In Canada, as we seek to put our house in order, we find ourselves once again dependent on our own productivity and enterprise to restore our well-being. I am encouraged by the eagerness of our wealth-producers to get on with their task. I am also reassured by the growing public recognition that industry is the real means of support of our society.

Canadians have always welcomed challenge. We are, at heart, an independent people. Let us look briefly at some of our accomplishments, for our history stands as

a monument to our creative capacities.

Canadians working together tamed a vast hostile land. In spite of our harsh climate and short growing season, our farms have become among the most productive in the world.

In spite of our distance from market and difficult terrain, our forest industry is in the forefront of woodfibre utilization. Its high quality products are used worldwide.

In spite of their remoteness, our mines and smelters produce high quality metals and are famous for their technical excellence.

In spite of a relatively small population and great distances, our railroad and communication systems are amongst the best anywhere. Our banks and other financial institutions are internationally esteemed.

In spite of our long history of accomplishments and the remarkable industrialization of the last 35 years, we have tended to regard ourselves as rather unsophisticated when compared to other countries who do not have natural resources and whose economies are based on diversified secondary manufactures.

It may be, that because our most notable industries produce primary products which are often referred to in international trade as "crude materials", we have been left with an impression that these are the products of a technically "crude" society.

The reality is just the reverse. Our primary manufactures combine the highest levels of technical and scientific skills with the natural resources of this fortunate nation.

Our country sells abroad more of its high quality "primary" products than any other nation in the world.

A bushel of Canadian No. 1 Northern Wheat, which by the way, is the standard of excellence by which all the world's wheat is



judged, is a "primary product". To produce this wheat, the greatest skills in plant genetics, soil sciences, systems to replenish plant nutrients, plus complex mechanical equipment are applied most effectively.

As a result of our agricultural sophistication, we feed many more of the world's people than our borders contain, we assisted the world to bring about the "green revolution". Internationally, Canada's agriculture sets an example of productivity while stimulating the development of our service industries at home.

You may find it surprising that the mineral industry requires competence in almost every science and technology. Satellites are used for mapping, computer sciences are used to interpret data and the newest discoveries in geoscience are swiftly applied in the industry.

Each mineral deposit presents its own unique challenge. No two mines are the same, no two tons of ore in the ground are the same, it is from these heterogeneous raw materials that our consistently pure metals are extracted and refined. These are our "crude products".

Cominco also produces ultra-high purity metals, specific to the electronics industry. These are frequently referred to in awe, as high technology products. The sophisticated technical and human skills needed to further refine metals to a point at which the impurities are one part per million is indeed impressive. Impressive as high purity metals technology may seem, the technology required to produce the primary metal from the ore itself is many times more complex.

High technology, then, is the dominant characteristic of Canada's resource industries. To meet the needs of our primary industries, Canadian engineering and

construction companies, together with an array of secondary manufacturers, have developed skills which are now in demand throughout the world.

To keep our place in the world of the future, we must continue to expand our technological competence.

Skills will develop only in response to demand. Our resource industries have furnished a ready market in the past, and provided they continue to be successful, will do so in the future.

Encouraging the success of our resource industries then, is crucial to Canada's development into a mature industrialized society. For these basic industries to flourish, the social climate must be affirmative and the political climate stable.

In turn, as our industries prosper, they will generate the wealth necessary to provide for the well-being of our society. As business depends on the political and social climate, so do these depend on the business climate.

The political climate in British Columbia, Cominco's traditional home, the centre of our major operations and the focus of our present major capital expenditures, has a profound effect on the well-being of the company. It is also true that the well-being of all the major wealth-producing companies in British Columbia is vital to the health of the economy of the province.

It is my belief that in the next short while, a renewed political stability will emerge for the wealth-producing industries. I am confident the mineral policies and taxation practices both in British Columbia and Canada will encourage a revitalization of mining.

This supportive attitude will coincide with strengthening metal markets which are making a rapid recovery from the slump of the past few years.

Shortly, the industry will expand to meet the increased demand for metals which the world economy will require.

Given the rather sorry history of the last decade for mining, you might well ask why I am so optimistic about the future.

I am convinced that a growing number of our citizens have come to recognize the necessity for a business climate conducive to the creation of new opportunity, new jobs and new wealth. New wealth creation is urgently needed to pay our external bills, halt inflation, and secure the value of our currency. The climate for wealth-production is a climate of stability in which our people will have the confidence and trust to invest their capital, their talents, and their futures.

Given renewed appreciation for the need for Canada to reinforce the successful segments of the economy, how is Cominco placed to participate to the full in a resurgence of metal mining, refining and chemicals?

The company is fortunate in having the bulk of its capital in place, in being well advanced on major plant modernization, with relatively low future environmental protection costs because of its past concern.

Two years ago we balanced our production of major plant nutrients by adding a 1200 ton a day ammonia plant in Alberta.

The condition of our metallurgical plants, already competitive, will continue to improve. Competition from new production facilities by other companies will have to carry a heavier capital burden than will the incremental volume increases coming on stream in our plants in the next few years.

Cominco's strong strategic position will be reflected in the earnings of the company and the return to shareholders.

Although competitive processing plants, backed-up by productive mines and

adequate ore reserves are fundamental to the company's long-term success, they require skilled staff and a management structure conducive to the attainment of optimum results.

The establishment, over the past few years, of regional management groups in the United States, Australia, the United Kingdom as well as in British Columbia, the Prairies and the Northwest Territories, has moved the day-to-day direction and control closer to all our major operations.

All the groups are performing well and the proximity of management to the producing units is working even better than we had expected.

This system of control is meeting the test of excellence and will serve the company well in the years to come.

Our sales organization with its headquarters in Toronto has its representatives deployed in a way that ensures all our major markets are well served. The regional offices for fertilizer sales are located in Calgary and Spokane and for metals in London, England, Toronto and Chicago. They are well equipped to enable Cominco to earn its share of the world markets.

In concluding my comments, I would like to thank the Directors for their unfailing interest in, and support for, all the major activities of the company and for their valuable advice to management.

Review of Operations by M.N. Anderson, President and Chief Operating Officer



Mr. Chairman, Ladies and Gentlemen:

1978 was a fairly good year for your company.

1979 should be considerably better.

I would like to begin this morning by thanking our employees for the contributions they have made in helping to achieve the results we have before us today.

A year ago, we viewed the 1977 results at a time when zinc prices and demand were at a low ebb; lead and fertilizer markets were just beginning to strengthen; but we were optimistic.

1978 lived up to our expectations. By mid-year, we saw an end to the price slide of base metals. There was a remarkable strengthening in the second half of 1978 and this strength continues. As a result, your company has recorded two quarters of very satisfactory earnings.

We entered 1979 with operations producing at capacity; our exploration group prepared for another successful year; our research people set to pursue new opportunities; and our sales organization ready to do its job.

I would like to review these 1978 activities with you.

Exploration

Your company's 1978 exploration expenditures were over \$30 million; one-half of which was spent in Canada; one-quarter in the U.S. and the balance principally in Europe and Australia.

Through these efforts, we were again successful in replacing ore mined at many locations. In addition, as described in the Annual Report, our field exploration programs located a number of interesting new opportunities that require further investigation in 1979.

At the Con gold mine at Yellowknife, a major

underground exploration program was begun. The goal of this program is to expand ore reserves and increase production at this venerable old mine.

In Australia at the Que River zinc/lead/copper property, an underground exploration program was completed. Tonnage and grades were confirmed, several test shipments of ore were sent to a nearby concentrator, and we are hopeful that a production decision will be made in the near future.

At the Arvik zinc/lead property in the high Arctic, negotiations continued with the Federal government and with our partners, Bankeno Mines Ltd. to settle terms and conditions for development. Many issues have been resolved and we are optimistic that the remaining issues will soon be resolved enabling us to proceed with this project.

At the Valley Copper property here in B.C., discussions continued with Bethlehem Copper Corporation and its other major shareholders on issues which must be resolved before development of this important copper resource can begin.

The recent improvement in the copper market is encouraging. In addition, we are heartened by a growing awareness that the mining industry needs and deserves more public support. Governments now understand our need for a more stable tax climate and that we must overcome the regulatory uncertainty that our industry has faced in recent years.

These events offer promise for Que River, Arvik and Valley Copper. We are working hard for development of these properties.

Operations

Turning to operations, production results in 1978 were very much influenced by the market place. We curtailed production of

zinc and zinc concentrate until the second half of the year because of weak markets and high inventories. At year-end, inventory levels were normal and all zinc production units were operating at capacity.

Production of lead and lead concentrate was maximized throughout 1978 to match the strong markets. Lead concentrate production at all operating units was improved over the previous year. Metal production, however, was adversely affected by a labour dispute at the U.S. smelter where Magmont lead concentrate is tolled and by operating difficulties at Trail.

Gold and silver production improved in 1978. Gold production from the expanded facilities at the Con mine was 25% higher than in 1977 and this together with higher prices for gold and silver, resulted in improved earnings.

Tin production from Aberfoyle Ltd. in Australia increased in 1978. Stronger prices for tin and the higher production contributed to improved earnings.

Turning to new developments in our metal and mining business in 1978, the most significant are the modernization programs at the Trail metallurgical plants and at the Sullivan mine in Kimberley. These programs were approved two years ago and to date, projects costing more than \$170 million have started.

At the lead smelter, a new continuous dressing plant was commissioned and a new feed plant will be commissioned soon. These production units will improve environmental conditions and productivity at the smelter.

On the zinc side, good progress was made in design and on the start of construction of the electrolytic and melting facility.

While this new plant work seems to attract most attention, our existing metallurgical facilities are not being neglected. Several



important improvements have been made and our plants are in good order to operate at capacity.

Construction is also underway on more than \$40 million worth of environmental improvements at Trail and Kimberley which will augment our already significant environmental protection programs. I am pleased also to report that we are enjoying more cooperation and assistance from our environmental regulators.

At the Sullivan mine, mechanization made good progress and the important next phase of mine-wide mechanization has begun.

Successful pursuit of modernization at Trail and Kimberley will assure that these operations will continue to serve the world's growing needs for lead and zinc and it will enable your company to compete profitably for these markets.

Turning to new developments at other mining operations.

At Pine Point, we recently installed a 30 cubic yard dragline. This unit will significantly increase that property's productivity and flexibility.

For the two important new zinc mines in Europe in which your company has an interest, Tara Mines in Ireland and Exminesa in Spain, 1978 was the first full year of production. Soft zinc markets resulted in losses at both operations and required rearrangement of the debt. These mines are operating reasonably well now and with improved zinc prices, 1979 should be a profitable year.

Before leaving the mines, I would like to comment on the closing of the H.B. mine this past year after the orebody was exhausted. This great little mine produced over 7 million tons of ore, it won many awards for safety and was our lowest cost, most productive mine for many years. It was

a source of pride for everyone who was associated with it.

Turning now to our fertilizer operations.

The Vade potash mine in Saskatchewan enjoyed record production and sales last year. Unfortunately, the potash tax problem persists, but is being actively pursued through discussions with the provincial government and we anticipate a resolution to the problem this year.

The ammonia-urea complex at Carseland, Alberta completed its first full year of production in 1978. Production was at design capacity and the performance of this plant continues to improve.

At the Borger, Texas ammonia plant, production was normal last year. Construction has begun on a new 85,000 ton per annum urea facility which will cost \$16.0 million. This unit will provide profitable new market opportunities.

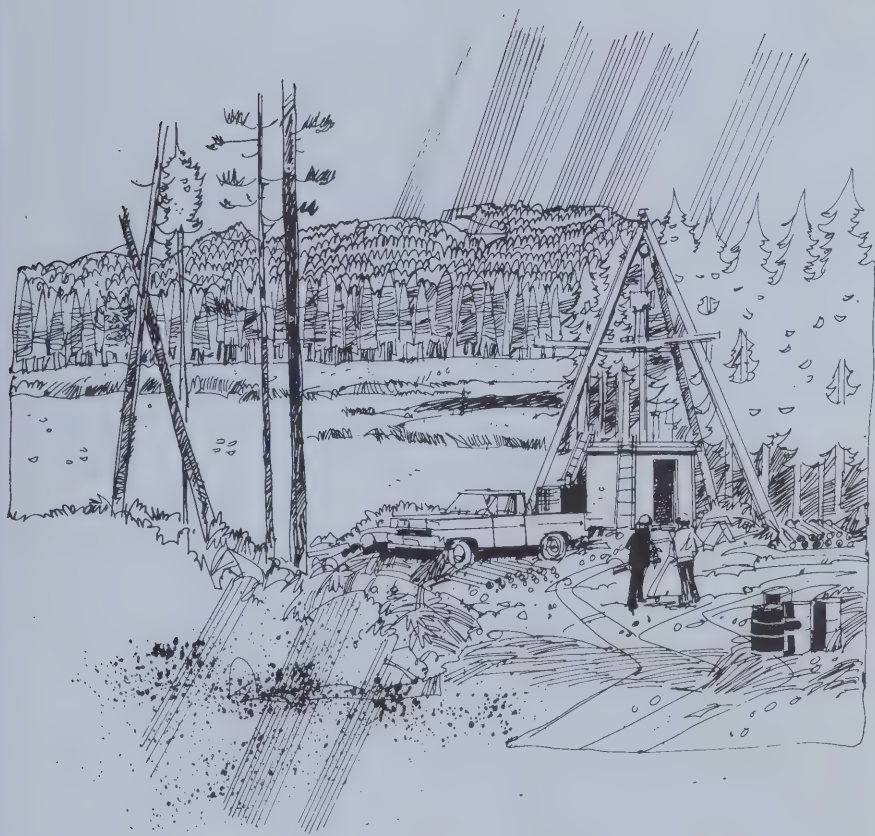
Despite stronger demands for all fertilizer products, prices continue to lag the rising cost of natural gas, one of the principal elements of fertilizer manufacture; and the return on investment in this segment of our business continued at less than satisfactory levels. We are, however, seeing an improvement in this situation in 1979.

I would like to report now on the industrial relations of your company.

1978 was an active year with many union contracts renewed without work stoppage.

1979 likewise will be a busy time. We recently signed a one year agreement with the union at West Kootenay Power and Light and we are negotiating at Pine Point, at Trail/Kimberley and at Vade Potash. Local 7552 of the United Steelworkers Union at Vade began strike action on April 5th.

Despite this strike, I feel our labour relations in Canada are relatively good. We have worked in cooperation with the union locals



this past year to solve many problems. We have worked on safety and health issues; on solving production and cost reduction problems in the face of weak markets and I am looking forward to this relationship continuing.

Another subject I would like to address this morning is safety. Our industry by its very nature, has some built-in hazards. We deal every day with hot metals, corrosive chemicals and the hazards inherent in a mining environment. Over the years, our employees have developed considerable skill in dealing with these conditions.

But as your company grows, and when our people with a lifetime of valuable experience retire, we must ensure that our new employees are properly trained to do their jobs safely. Young people today are very bright and certainly capable of filling their fathers' and their grandfathers' shoes. It is our responsibility to see that they are properly trained and motivated to work safely. During 1978, in cooperation with our unions, we sought to renew the keen edge that is so necessary to make safety programs successful.



Another part of our business upon which I would like to report today is research and development. It is essential that your company remain in the forefront of technology in areas in which we are involved.

Cominco has a long-standing record for product and process innovation. Electrolytic zinc refining was pioneered at Trail; differential froth flotation was pioneered at the Sullivan mill; and sulphur emission problems from smelting were resolved at Trail and led to Cominco being one of the first chemical fertilizer manufacturers in Canada.

More recently, we pioneered mining in the Arctic; we have been in the forefront of high purity metal refining and manufacturing technology; and we have introduced many innovative applications for zinc and lead alloys.

Today, we are pioneering in three important new areas:

At Trail, as part of modernization, we are installing a zinc pressure leach plant. This is new technology, developed by Cominco Research working jointly with Sherritt-Gordon engineers. It is designed to improve zinc production through lower costs and with an environmentally acceptable process. The project will cost \$23.0 million and will add 30,000 tons of capacity to our plant.

At the Rubiales mine of Exminesa in Spain, we are helping develop a new mining technology called Vertical Crater Retreat. This method was originally developed by Canadian Industries Ltd., and we have worked with them in furthering its development. In 1979, we will be applying this technique in Australia.

The third area of new technology that we are considering seriously is the Kivcet direct lead smelting process. Developed

recently in Russia, this process should reduce costs and be more environmentally and hygienically acceptable than existing technology.

With the help, the skills and the dedication of people developing new ideas such as these, your company will maintain its competitive advantage in the market place.

Before concluding, I would like to comment on your company's prospects for 1979.

Yesterday, we announced the first quarter earnings. They are \$38.3 million or \$2.14 per share. Your company's earnings, and indeed all Canadian mining companies' earnings, are improving. 1979 should be a good year — the first good year since 1974.

What has happened to our industry and in our country during this period?

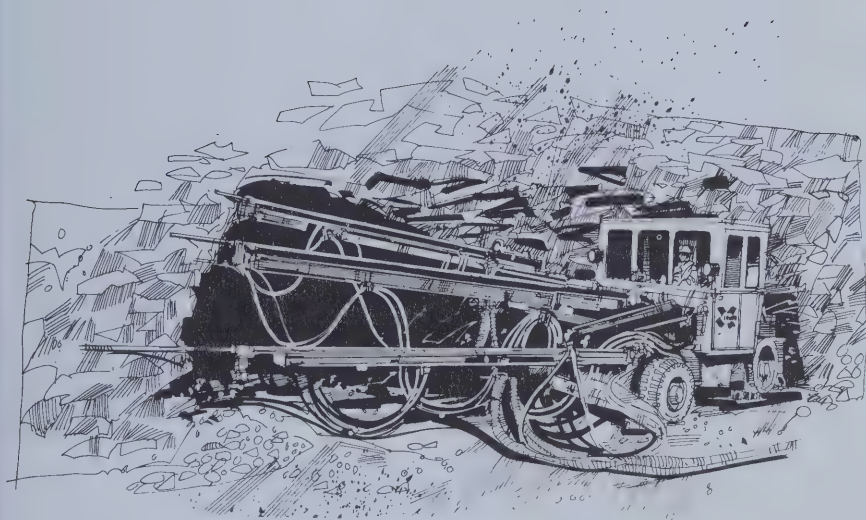
Since the oil shock of 1973-74, the attention and support of governments in Canada has focused almost entirely on the energy sector. The mining industry has received little encouragement or support.

In this same time frame, we saw governments raise mining taxes and royalties, we saw metal prices plummet and inflation take its toll. The net result is that the mining industry's earnings were eroded and our liquidity strained.

If we examine the revenues, profits and dividends of Cominco over the past ten or twelve years, we find:

- that revenues have nearly quadrupled, from \$240 million to \$900 million, while
- profits have not quite doubled from \$35 million to \$65 million but
- common share dividends have only gone up from \$24 million to \$34 million.

During this period, new projects have *more* than quadrupled in cost. The Magmont mine was brought into production in 1968 at a cost of \$18.5 million; today it would cost \$80 million. In 1972, Fording Coal was



started at a cost of \$90 million; it would cost \$350 million today.

These figures depict the problem that all mining companies have when accumulating the necessary capital and justifying new multi-million dollar projects.

Recently, we have seen the markets for many of our products strengthen. Our profits *are* rising — and they must continue to rise so that we may re-establish liquidity. These profits will fund your company's half billion dollar modernization program and will permit even larger amounts to be invested in the new mining ventures I have already mentioned.

Yet, there are those in our society who again claim that we are making unconscionable profits and who demand that governments do something about it. They forget that the current profitability of the Canadian mining industry is attributable, in large part, to a weak Canadian dollar. As the Canadian economy strengthens, so will our dollar strengthen and we will lose this temporary advantage.

Rather than limit or repress profitable

mining — governments must seek ways to keep our industry profitable. They must not only refrain from over-taxing, but they must continue to reduce the burden and the inefficiencies of too much regulation. We do not question the need for reasonable regulation concerning the environment and the work place but we must not be frustrated by over-regulation. We must not spend an inordinate amount of our available capital pursuing unnecessary regulations and thus leave insufficient capital to create new and more efficient productive capacity.

New production creates jobs, it helps to stimulate the economy and it allows the mining industry to contribute its full share to our nation's well-being. Today, in Canada, 10-12% of all jobs are provided directly or indirectly by the mining industry. 55% of all railway freight and 60% of all cargos exported through Canadian ports are products of the mining industry. One-third of Canada's export revenues are generated by the mining industry.

This is the situation today. Our industry's potential is far greater still — but only if the profitability of mining is secure.

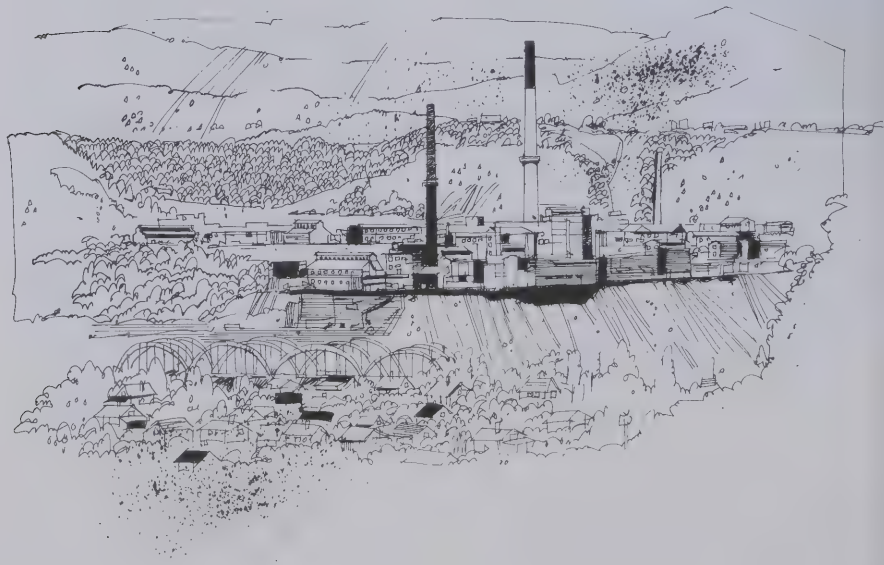


Ladies and Gentlemen, we must make ourselves heard. We are a significant political constituency and we must encourage our governments to give us their political support to permanently end the capital famine that we have been living through and from which we are just beginning to emerge.

We must reject the idea that record profits, just because they are larger than in previous years, are the cause for apology. They are not. The cost of energy; the cost of materials for construction; the cost of capital; and the cost of production are likewise all at record levels. Higher prices and higher profits are an indispensable part of our industry and, if we are to do the job of providing our customers with the products they need in the future, we must have these higher prices.

Individually and collectively, let Cominco's more than 27,000 shareholders constantly remind our governments and society at large that mining has a significant contribution to make and that we must be permitted to make that contribution. The continued economic health and well-being of Canada in large measure depends on our contribution being made.

Profit is a good thing. We need it and we must use it wisely to prepare for the future. Barring unforeseen circumstances, 1979 will be a good year for your company. It should be a year that shareholders and employees, the Board of Directors and Management will all be proud of.





Cominco Ltd.
200 Granville Square
Vancouver, B.C.
V6C 2R2

Highlights — 5 Year

(all dollar amounts in millions except per share figures)

OPERATIONS

	1979	1978	1977	1976	1975
Sales of products and services	\$1,273.9	\$ 901.2	\$ 759.2	\$ 675.3	\$ 664.6
Net earnings	203.7	67.4	63.4	49.3	75.5
— per common share	11.52	3.59	3.50	2.75	4.45
Funds from operations	323.9	142.2	136.8	110.3	148.6
— per common share	18.58	7.99	7.82	6.35	8.75
Dividends on common shares	80.9	34.0	39.1	34.0	50.9
— per common share	4.75	2.00	2.30	2.00	3.00
Capital expenditures	150.1	87.4	80.8	139.8	121.8

FINANCIAL POSITION

Assets:

Working Capital	\$ 269.6	\$ 208.1	\$ 163.3	\$ 206.1	\$ 201.3
Fixed assets (net)	645.5	564.3	556.9	532.4	442.2
Investments and other assets	166.0	161.0	151.6	104.5	91.2
	\$1,081.1	\$ 933.4	\$ 871.8	\$ 843.0	\$ 734.7

Represented by:

Long-term debt	\$ 226.0	\$ 234.9	\$ 249.5	\$ 253.5	\$ 212.2
Income taxes not currently payable	119.6	92.1	84.5	73.5	69.0
Minority interests	54.8	42.4	51.4	50.1	49.2
Shareholders' equity	680.7	564.0	486.4	465.9	404.3
	\$1,081.1	\$ 933.4	\$ 871.8	\$ 843.0	\$ 734.7

Return on assets	23.7%	9.4%	9.0%	9.2%	14.8%
Return on common shareholders' equity	37.7%	12.8%	12.3%	11.3%	19.3%

Number of employees at year-end	11,254	10,539	10,898	10,696	10,887
Total employment costs	\$ 278.5	\$ 239.7	\$ 223.4	\$ 200.0	\$ 184.6
Market price per common share					
(Toronto Stock Exchange) — High	\$ 55½	\$ 34⅞	\$ 38⅞	\$ 41¾	\$ 35⅞
— Low	\$ 31½	\$ 23	\$ 27⅞	\$ 32⅞	\$ 24¾

1975 to 1978 figures restated.

See Note 7 to the Financial Statements

Cominco Ltd., 74th Annual Report 1979
Report of the Directors



G.H.D. Hobbs F.E. Burnet M.N. Anderson

To the Shareholders:

Consolidated net earnings in 1979 were \$203.7 million or \$11.52 per common share compared to \$67.4 million or \$3.59 per common share in 1978. Dividends of \$88.3 million were paid to shareholders; \$2.00 per share on Series A Preferred Shares; \$1.71 per share on Series C Preferred Shares; and \$4.75 per share on Common Shares which included a special dividend of \$1.50 per common share. In November the Company announced it would establish a policy of paying regular dividends on common shares quarterly, instead of semi-annually as in the past. An initial quarterly dividend of \$1.10 per common share was declared in February 1980. Dividends will be paid in March, June, September and December in each year.

The year 1979 set new highs for sales and earnings. This record performance resulted from a combination of strong markets and an improvement in metal prices. As a substantial portion of Cominco's products are sold in U.S. dollars or in Sterling, the relationship of the Canadian dollar to these currencies also had a beneficial effect on earnings. Since mid 1976 the Canadian dollar has declined in value relative to the U.S. dollar reaching a low of approximately \$0.84 in relation to the U.S. dollar in 1979. A general strengthening of the Canadian dollar is expected during 1980.

The Company acquired the remaining 25 percent of the outstanding shares

of Arvik Mines Ltd., owner of the Polaris orebody on Little Cornwallis Island, from Bankeno Mines Limited for \$5 million in October, 1979. Under the arrangement, Bankeno has the option to acquire, for \$7.5 million, a royalty interest of 25 percent of the net proceeds of production from the Polaris mine and any other mines on the Arvik properties which are brought into production by the Company. In addition, the Company loaned Bankeno \$3 million.

On November 5, 1979, the Company announced its intention to bring the Polaris zinc-lead mine into production at a cost of approximately \$150 million, of which \$110 million is for development and \$40 million for working capital. Financing has been arranged with Canadian banks. The term of the financing is for 15 years with interest related to the prime Canadian rate. Production is scheduled to begin in 1982.

In Australia, Aberfoyle Limited, owned 47 percent by the Company, commenced development of the Que River zinc-lead-silver deposit in Tasmania at a cost of over \$19 million. Production will begin in 1981.

In British Columbia, the expansion and modernization of the Trail metallurgical plants and the mechanization of the

Sullivan mine at Kimberley progressed well and by the end of the year over \$300 million had been committed for these projects.

In Saskatchewan the Company's potash operation became profitable. An agreement was reached with the provincial government for conditional settlement of the resource tax litigation. All potash producers in Saskatchewan have entered into resource payment agreements which became effective July 1, 1979. The province is accepting payment under these agreements in lieu of the resource taxes previously collected.

Cominco and five other fertilizer producers were found not guilty of an alleged unlawful combination to prevent, or lessen unduly competition in fertilizer sales in Western Canada. The trial, in the Supreme Court of Alberta, lasted some 150 days. In his Judgment, Mr. Justice Brennan found the Western Canadian fertilizer market to be highly competitive.

On March 14, 1980 Pine Point Mines Limited announced that drilling near the northerly boundary of the Pine Point property has located a separate ore zone estimated to contain 6 million tons of 10 percent to 12 percent zinc-lead ore. This new discovery has increased the contained metal in Pine Point's published ore reserves by approximately 25 percent. Further exploration work on this property is continuing.

At the 1979 Annual Meeting, William Moodie, after valued contribution to the Board, retired. P.A. Nepveu was elected to the Board. During the year, W.G. Wilson became Executive Vice-President, and K.H. Spurr, Vice-President, Metal Sales.

On behalf of the Board of Directors we wish to record our appreciation for the role played by all employees in 1979, the Company's most successful year.

F.E. BURNET
Chairman of the Executive Committee

G.H.D. HOBBS
Chairman of the Company
March 19, 1980

Report of the President and Chief Operating Officer

Marketing

Record sales and earnings were attained in 1979. Sales of \$1,273.9 million were \$372.7 million greater than last year. The general improvement in markets, particularly for metals and concentrates, which began during the second half of 1978 continued into 1979. World consumption for virtually all of the Company's products increased, inventories declined and prices advanced. The combination of stronger markets with significantly improved metal prices, particularly for lead, silver, zinc and gold, resulted in increased earnings. Average prices for these refined metals for 1975 through 1979 are shown on page 4. The relationship of the Canadian dollar to other currencies continued to have a beneficial effect on earnings.

Sales of refined lead were 174,000 tons, and of refined zinc 280,400 tons. This compares to 170,000 tons and 307,400 tons respectively for 1978. Zinc and lead concentrate sales were 305,900 tons, compared to 264,300 tons in 1978. Metal and concentrate inventories of lead and zinc were at satisfactory working levels at year-end.

Sales of gold totalled 122,300 ounces and of silver 9,883,000 ounces. The impact of the dramatic increase in the price of gold in the fourth quarter was not fully reflected in earnings due to contractual commitments for the sale of part of the Company's production. The average price for gold in 1979 was \$337.35 per ounce compared to the Company's average realized price of \$305.62 per ounce. The increase in the price of silver from an average of \$6.25 per ounce in January to an average of \$21.79 per ounce in December had a significant favourable effect on earnings.

Demand for chemical and fertilizer products was stronger than in recent years and prices were generally higher than in 1978. Sales of fertilizers and chemicals amounted to 2,692,000 tons (including 877,000 tons of potash) compared to 2,622,000 tons (including 859,000 tons of potash) in 1978. While sales volumes exceed

levels of the previous year and prices improved, increased earnings were partly offset by rapidly escalating costs, particularly for natural gas. Earnings from fertilizer operations were still not sufficient to provide a satisfactory return on capital.

Costs of Products and Services

The cost of products and services sold was \$676.6 million, an increase of \$116.9 million over 1978. The higher market prices for metals resulted in an increase of \$33.5 million in the cost of concentrates purchased for treatment. Higher sales volumes increased costs \$19.8 million and the remainder, \$63.6 million, reflects higher unit cost of production resulting from continued inflation in the cost of other raw materials, fuel and labour.

Metals

Total concentrate production was 948,200 tons compared to 981,000 tons in 1978. The Sullivan mine at Kimberley, British Columbia and the Pine Point mine in the Northwest Territories remain the main sources of supply of concentrates to the metallurgical operations at Trail, British Columbia. Lead concentrate from the Magmont mine and some zinc concentrate from the Black Angel and Pine Point mines were treated on a tolling basis in smelters of others and the metals received were sold by the Company.

Refined zinc production at Trail was greater than in 1978. The plants operated at full rates during the first half of the year but in response to some softening in demand, production was curtailed beginning in mid-September. Refined zinc production was 229,000 tons, compared to 216,000 tons in 1978. Production of refined lead at Trail was 140,000 tons compared to 147,000 tons the previous year.

Total gold production was 120,100 ounces down from 133,200 ounces the previous year because of mining through a section of lower grade ore at the Con mine. Silver production was 10,002,000 ounces of which 47 percent came from Cominco-owned

sources and 53 percent was purchased in concentrates which were treated at Trail. The profit margin on silver produced from Cominco-owned sources reflects the full impact of changes in the price of silver whereas the profit margin on silver from purchased concentrate is dependent on the payment terms for the silver content of the concentrate.

Substantial progress was made on the Company's major expansion and modernization programs at the Trail metallurgical plants and at the Sullivan mine at Kimberley.

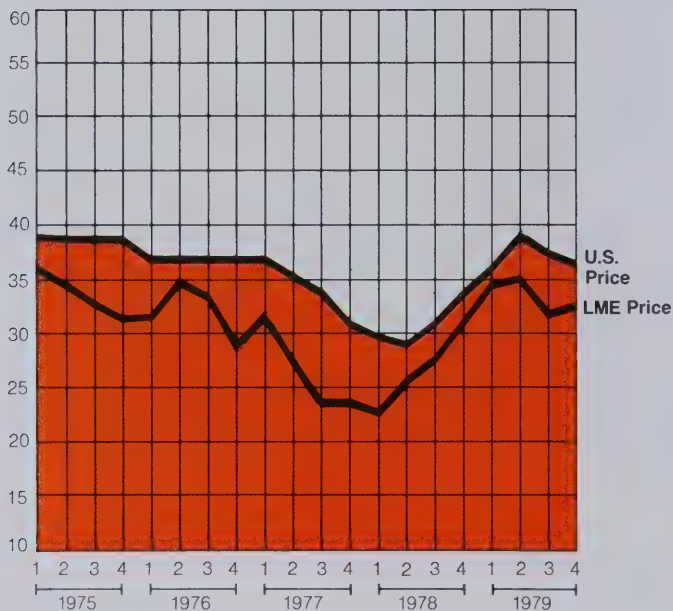
At Trail:

- In late 1979, two new major sections of the lead smelter were commissioned — the smelter feed plant, which improved the blending of the various raw materials, and a new blast furnace, of modified design, which will increase annual production by 20,000 tons.
- The construction program for the zinc electrolytic and melting plant was accelerated by two years and is now scheduled for completion by the end of 1982.
- The construction phase of the zinc concentrate pressure leach project using technology developed by Cominco and Sherritt Gordon, was well underway, with commissioning scheduled for 1980.

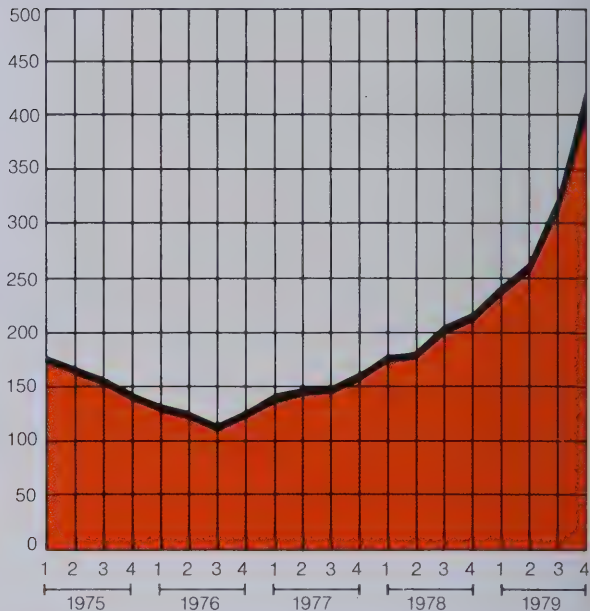
At the Sullivan mine:

- Conversion to mechanized mining continued and an underground repair shop and warehouse were put into operation.
- A new mine office and changeroom complex was under construction.
- A waste water treatment plant, incorporating technology developed by the Company, was commissioned to purify water prior to discharge.

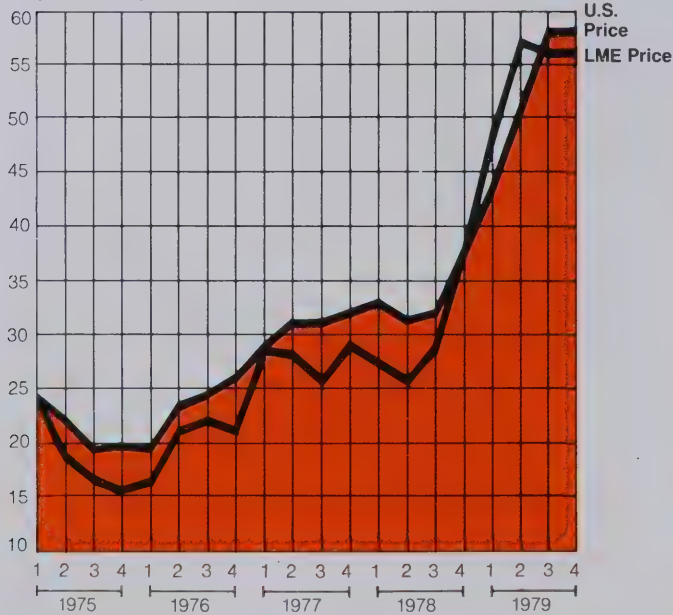
Zinc Prices
(U.S. ¢/lb.)



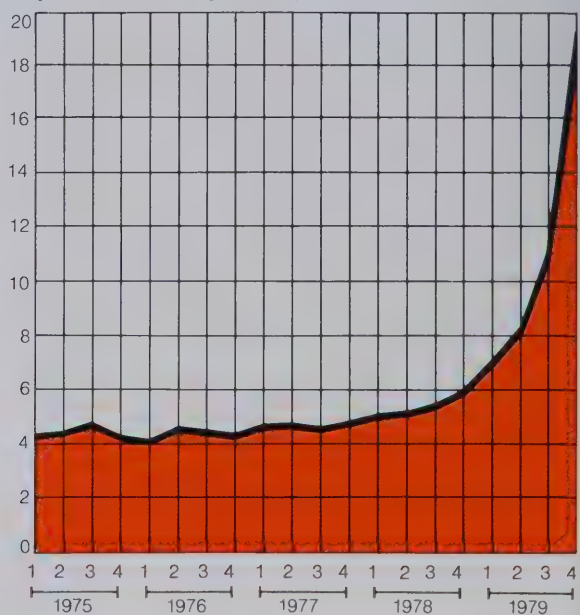
London Gold Price
(U.S. dollars/troy ounce)



Lead Prices
(U.S. ¢/lb.)



U.S.A. Silver Price
(U.S. dollars/troy ounce)



Development of the Polaris zinc-lead ore deposit on Little Cornwallis Island in the Canadian High Arctic, at a cost of approximately \$150 million, was started late in the year. Production is scheduled to begin early in 1982 with the first shipment of concentrates to be made that summer. Ore reserves are approximately 25 million tons, and at an operating rate of 2,200 tons a day, the mine is expected to produce 187,000 tons of zinc concentrate and 42,000 tons of lead concentrate annually.

The world's most northerly mine, Polaris will be the eleventh largest zinc-lead producer in the western world.

In August 1979, Aberfoyle Limited began development of the zinc-lead-silver deposit at Que River in Northwest Tasmania, Australia. Approximately \$10 million has been spent on exploration and development and a further \$19 million will be expended before the mine is brought into production in 1981.

Fertilizers and Chemicals

The Company's fertilizer and chemical operations in Canada and the United States manufactured 2,612,000 tons of product compared to 2,636,000 tons for 1978.

The Carseland, Alberta ammonia plant produced 424,000 tons of ammonia compared to 398,000 tons in 1978. Of this amount, 137,000 tons were sold and the balance used in the production of 481,000 tons of urea compared to 456,000 tons last year. At Calgary, Alberta fertilizer and chemical production was 159,000 tons compared to 128,000 tons.

In British Columbia the plant at Trail produced 398,000 tons, compared to 364,000 tons in 1978, and at Kimberley 217,000 tons, compared to 207,000 tons.

Cominco American's plant at Borger, Texas produced 302,500 tons of ammonia, compared to 388,100 tons in 1978. Mechanical problems relating to delivery of gas into the plant and subsequent restart problems reduced production during the early part of the year. Of the total ammonia produced, 234,000 tons were sold and the balance delivered by an 850-mile pipeline and converted to 157,000 tons of ammonium nitrate at the company's Homestead plant at Beatrice, Nebraska. This compares to 135,000 tons of ammonium nitrate produced during 1978. Construction of an 85,000-ton-per-year urea plant, adjacent to the Borger ammonia facility, progressed well with production scheduled by August of 1980.

The Vade mine near Saskatoon, Saskatchewan produced 830,000 tons of potash compared to 878,000 the previous year. Loss of production resulted from a strike early in the year.

Production and Sales Statistics

		1979		1978	
		Sales	Production	Sales	Production
Refined Metal					
Zinc					
Trail	tons	228,000	229,000	254,000	216,000
Tolled — Pine Point	tons	3,800	3,400	15,400	13,300
— Black Angel	tons	48,600	47,200	38,000	39,200
		280,400	279,600	307,400	268,500
Lead					
Trail	tons	142,000	140,000	143,000	147,000
Tolled — Magmont	tons	32,000	34,000	27,000	28,000
		174,000	174,000	170,000	175,000
Silver (1)					
	ounces	9,883,000	10,002,000	10,015,000	10,117,000
Gold					
Con/Rycon	ounces	97,200	95,000	112,200	114,500
Others	ounces	25,100	25,100	18,700	18,700
		122,300	120,100	130,900	133,200
Concentrates (2)					
Zinc					
Sullivan	tons	—	143,000	—	131,000
H.B.	tons	—	—	—	16,900
Magmont	tons	9,300	9,300	10,500	10,300
Pine Point	tons	73,700	288,000	56,900	302,000
Black Angel	tons	101,400	167,000	54,900	158,000
		184,400	607,300	122,300	618,200
Lead					
Sullivan	tons	—	160,000	—	150,000
H.B.	tons	—	—	—	4,300
Magmont	tons	12,400	57,900	16,600	60,900
Pine Point	tons	63,500	73,900	75,900	100,000
Black Angel	tons	45,600	49,100	49,500	47,600
		121,500	340,900	142,000	362,800
Chemicals and Fertilizers					
Canada	tons	1,388,000	1,391,000	1,300,000	1,294,000
United States	tons	427,000	391,000	463,000	464,000
		1,815,000	1,782,000	1,763,000	1,758,000
Potash					
	tons	877,000	830,000	859,000	878,000

(1) Includes silver sold in concentrates and intermediate products.

(2) Sales tonnages exclude concentrates processed at Trail and tolled through other smelters.

Other Products

Western Canada Steel, with plants in Vancouver, Calgary and Hawaii operated close to capacity throughout the year. Sales for the year were 37 percent higher than in 1978 as a result of increased volume and higher selling prices. The scrap steel shredding plant acquired in 1978 at Richmond, British Columbia performed well.

National Hardware Specialties, with a zinc diecasting plant and a plating plant in Ontario, had a three-month strike in 1979. Notwithstanding this, earnings were slightly higher than the previous year due to operating efficiencies achieved and higher prices received for products sold.

The Cominco electric generating plants on the Kootenay and Pend-d'Oreille rivers operated at capacity during the year. Power surplus to the Company's industrial needs was offered for sale to West Kootenay Power and Light Company, Limited, B.C. Hydro and Power Authority and Calgary Power Ltd. When these utilities did not require the power for their needs, the surplus was offered for sale to United States consumers on an interruptible basis.

West Kootenay Power which supplies electrical energy to the south central portion of British Columbia, had a load growth of eight percent during 1979. During the year the company added 2,700 customers. Capital expenditures of \$9 million were made to improve the system and to serve new customers.

During 1979 West Kootenay Power had expected to obtain approval for rate increases from the British Columbia Energy Commission in order to restore its earnings to an appropriate level. This process has been delayed until approximately mid-1980. Cominco and West Kootenay Power have been working to put West Kootenay Power in a position to complete the regulatory review and finalize rate increases during 1980.

Associated Companies

Associated companies are those in which Cominco owns 50 percent or less of the shares but in which it has significant influence. Associated companies include the following:

	Location	% Owner-ship	Cominco share of Earnings (millions)
			1979 1978
Aberfoyle Limited	Australia	47	\$ 3.2 \$ 1.5
The Canada Metal Company Limited	Canada	50	2.3 1.6
Exploración Minera Internacional España S.A. (EXMINESA)	Spain	47	(0.9) (3.3)
Fording Coal Limited	Canada	40	5.7 7.8
Others (Cominco Binani Zinc Limited - India; Mazak Limited - U.K.; Mitsubishi Cominco Smelting Company Limited - Japan)			0.4 1.9
			\$10.7 \$ 9.5

In 1979 Aberfoyle Limited had revenues of \$56.5 million, and net earnings of \$7.7 million, compared to \$44.5 million and \$5.9 million respectively for 1978. Total metal in concentrates produced was 13 percent higher than the previous year.

The Canada Metal Company's sales at \$110 million were 37 percent above

1978, almost entirely due to higher metal prices. Strikes at plants of major customers and a deteriorating automotive market held sales volumes to the level of the previous year.

Production at the Rubiales mine of Exminesa in Spain increased steadily during the year. This new mine produced 102,300 tons of zinc concentrate and 18,700 tons of lead concentrate. Sales were 101,000 tons of zinc concentrate and 18,600 tons of lead concentrate.

Fording Coal Limited, with operations near Elkford, British Columbia, produced 3,221,000 tons of clean coal compared to 3,076,000 tons in 1978. Sales were 3,363,000 tons, 216,000 tons more than in the previous year. Net earnings were \$14.2 million compared to \$19.5 million in 1978. Although sales volume increased substantially, earnings declined because of higher labour, material and maintenance costs while selling prices were unchanged.

ORE RESERVES

Operating Mines

		1979				1978			
		Ore (Tons) (Thousands)	% Pb	% Zn	Ag Oz./Ton	Ore (Tons) (Thousands)	% Pb	% Zn	Ag Oz./Ton
Measured and Indicated									
<i>Zinc-Lead</i>									
B.C.	Sullivan	54,000	4.5	5.9	1.1	56,000	4.6	5.9	1.1
N.W.T.	Pine Point	38,000	1.9	5.0	—	37,000	1.9	5.1	—
U.S.A.	Magmont	6,300	7.7	1.1	0.3	7,000	8.1	1.3	0.3
Greenland	Black Angel	3,300	4.6	13.4	1.0	3,400	4.8	13.9	1.0
Spain	Rubiales	13,800	1.4	7.6	0.4	13,500	1.4	7.6	0.4
<i>Gold</i>									
N.W.T.	Con-Rycon	1,800			Ozs. Au/Ton .52	1,650			Ozs. Au/Ton .57
<i>Tin-Tungsten</i>									
Australia	Aberfoyle	3,600			% Sn WO ₃ .6	2,900			% Sn WO ₃ .6
<i>Phosphate Rock</i>									
U.S.A.	Warm Springs	7,600			% P ₂ O ₅ 30.0	7,300			% P ₂ O ₅ 30.0
<i>Potash</i>									
Saskatchewan	Vade	105,000			% K ₂ O 26.3	108,000			% K ₂ O 26.3
<i>Coal</i>									
B.C.	Fording Coal	65,000				63,000			

Potential Mines

		Ore (Tons) (Thousands)	% Pb	% Zn	Ag Oz./Ton	Ore (Tons) (Thousands)	% Pb	% Zn	Ag Oz./Ton
Measured and Indicated and Inferred									
<i>Zinc-Lead</i>									
N.W.T.	Polaris (Arvik)	25,400	4.3	14.1	—	25,400	4.3	14.1	—
Australia	Que River	6,900	5.2	9.6	3.5	6,800	4.6	8.3	2.8
U.S.A.	Magmont West	1,700	5.0	2.3	0.3	—	—	—	—
Spain	La Troya	5,500	1.2	10.7	0.5	5,500	1.2	10.7	0.5
<i>Copper</i>									
Canada	Valley Copper	800,000			% Cu 0.475	800,000			% Cu 0.475
<i>Mercury</i>									
B.C.	Pinchi Lake	1,200			Lbs. Hg/Ton 6.4	1,200			Lbs. Hg/Ton 6.4
<i>Phosphate</i>									
U.S.A.	Douglas	12,000			% P ₂ O ₅ 31.0	12,000			% P ₂ O ₅ 31.0
<i>Coal</i>									
Alta./Sask.	Fording Coal	1,827,000				1,810,000			

The investment in associated companies is carried on the balance sheet under the caption "Investments". These investments are carried at cost adjusted for the Company's share of earnings, losses and dividends. The assets and liabilities of associated companies are not included in the consolidated accounts. Set out below is a summary of financial information respecting associated companies:

(millions)

Results of operations for 1979:

Revenues	\$489.7
Costs and expenses	434.0
Earnings before the following	55.7
Income taxes	25.1
Exchange losses on translation of foreign companies	2.8

Total net earnings of associated companies \$ 27.8

Cominco's share of net earnings \$ 10.7

Dividends received by Cominco \$ 5.4

Financial position of associated companies at December 31, 1979:

Working capital	\$ 42.9
Fixed assets	216.9
Other assets	6.4
	\$266.2
Less: Income taxes not currently payable	\$ 43.5
Long-term debt	67.3
Other non-current liabilities	7.6
Net assets	\$147.8
Cominco's share of net assets	\$ 65.0

Other Companies

For those companies where Cominco does not exercise significant influence, the investment is carried at cost and only dividends received are included in income. The principal investments and the Company's share of ownership at December 31, 1979, were:

Bethlehem Copper Corporation	39.2%
Panarctic Oils Ltd.	8.0%
Tara Exploration and Development Company Limited	17.4%

During 1979 Bethlehem Copper Corporation, a copper and molybdenum producer operating in the Highland Valley of British Columbia, reported revenues of \$58.2 million and net earnings of \$13.7 million on shipments of

46,872,000 pounds of copper and 675,000 pounds of molybdenum. Cominco's proportional share of the earnings was \$5.4 million. Dividends received were \$2.0 million.

Panarctic Oils conducts exploration for oil and gas in the Eastern Arctic. Panarctic has no source of revenue and relies upon shareholders and exploration agreements with other companies for funds for drilling activity. To December 1978 Panarctic had discovered reserves estimated at 12.8 trillion cubic feet of gas, not yet sufficient to economically support a gas pipeline to markets. During 1979 the

company drilled nine holes. Cominco declined participation in exploration funding for the 1979 and 1980 drilling program; consequently its interest in Panarctic has been reduced to 8.0 percent.

Tara Exploration, which operates a major zinc-lead mine in the Republic of Ireland, reported revenues of \$101.3 million and net earnings of \$10.3 million on sales of 315,000 tons of zinc concentrate and 57,000 tons of lead concentrate. Cominco's proportional share of the earnings was \$1.8 million. No dividends were paid during the year.

Producing Mines

Location	Mine	Product	1979		1978	
			Ore (tons) Grade	Concentrate (tons)	Ore (tons) Grade	Concentrate (tons)
Zinc-Lead B.C.	Sullivan	Zinc	2,257,000		2,324,000	
		Lead	3.7% 5.0%	143,000 160,000	3.3% 4.6%	131,000 16,900
	H.B. (Note 1)	Zinc	—	—	223,000	
		Lead	—	—	4.6% 0.9%	16,900 4,300
N.W.T.	Pine Point	Zinc	3,291,000		3,290,000	
		Lead	5.5% 1.9%	288,000 73,900	5.9% 2.6%	302,000 100,000
U.S.A.	Magmont (Note 2)	Zinc	1,096,000		1,050,000	
		Lead	1.4% 8.2%	9,300 57,900	1.6% 8.2%	10,300 60,900
		Copper	0.4% 0.4%	5,400	0.3%	4,500
Greenland	Black Angel	Zinc	706,000		684,000	
		Lead	14.5% 5.5%	167,000 49,100	14.5% 5.8%	158,000 47,600
Spain	Rubiales (Note 3)	Zinc	751,000		335,000	
		Lead	8.9% 2.0%	102,000 18,700	9.2% 2.1%	46,200 8,500
Gold N.W.T.	Con/Rycon	Gold	217,000 .46 ozs.		220,000 .55 ozs.	
Tin Australia	Aberfoyle/ Storeys Creek	Tin	48,000		40,000	
		Tungsten	0.4% 0.4%	200 200	0.4% 0.5%	160 200
	Cleveland	Tin	389,000		428,000	
		Copper	0.5% 0.2%	2,290 2,120	0.5% 0.2%	2,490 2,140
	Ardlethan	Tin	642,000 0.5%	4,680	649,000 0.4%	3,770
Phosphate Rock U.S.A.	Warm Springs	P ₂ O ₅	192,000 29.0%		184,000 28.7%	
		Coal (Clean)				
B.C.	Fording	Coal	3,221,000		3,076,000	
Potash Saskatchewan	Vade	K ₂ O	2,467,000 25.2%		2,575,000 25.2%	

Notes:

1. Mine closed in August 1978.
2. Concentrate tonnages are Cominco American's 50% share.
3. Production from commencement of commercial operations July 1, 1978.

Research and Development

The Technical Research Centre at Trail, British Columbia, devoted much of its effort during 1979 towards the design phase of the first commercial-scale zinc concentrate leach plant, now under construction at Trail. A laboratory research program is underway to make the process applicable to other concentrates.

Significant advances were made on effluent abatement techniques, and procedures were developed for operations at Trail, Kimberley and the Con and Black Angel mines.

The Product Research Centre at Sheridan Park, Ontario, provides technical assistance and support to Cominco customers, and carries out continuing programs to develop new and improved uses for lead and zinc. Of particular significance in 1979 was the design and production of commercial scale equipment to produce lead alloy grids for maintenance free automotive batteries. The new high-speed technology will enable the lead battery industry to reduce manufacturing costs and to upgrade environmental conditions in their manufacturing areas. The total cost of research and development in 1979 was \$4.3 million.

Exploration

During 1979, additional ore was located at each of the mines operated by the Company and its subsidiary and associated companies. At the Con, Pine Point and Rubiales mines, additions to reserves were more than sufficient to replace production. An 800 square miles area was staked west of Hay River in the Northwest Territories and a drilling program was started.

Exploration for new deposits was largely concentrated in Canada, the United States, Australia and Europe. Newly found mineralization warranting further work was located on several properties in British Columbia, the Yukon and Northwest Territories, the United States, the United Kingdom,

and in Germany, France, Italy and Australia. These occurrences include zinc, lead, copper, gold, silver, molybdenum, tungsten, tin, uranium, diamonds and phosphate.

Exploration expenditures in 1979 totalled \$32.6 million. Of this total, \$19.1 million was spent to investigate and to evaluate identified mineral properties. This amount was capitalized as Investments in Mineral Properties and will be amortized against future earnings. The remainder, \$13.5 million, was expended on general mineral exploration and charged to earnings in 1979.

Employee Relations

The Company is concerned with maintaining a contemporary total compensation package for its employees — including both direct remuneration and a comprehensive group benefit program — as well as with providing the safest and cleanest practical physical conditions in the work environment.

Benefit programs designed to serve the needs of employees, in coordination with those provided by Government, are reviewed on a regular basis to ensure that they are modern and competitive. On January 1, 1979 a newly designed Retirement Plan for non-union staff went into effect. It includes a completely revamped basic coverage paid for by

the Company, as well as a Retirement Income Savings Plan requiring contributions from employees. The result is a contemporary retirement plan which provides a basic lifetime pension related to salary and service and additional retirement income purchased by the employees' own contributions.

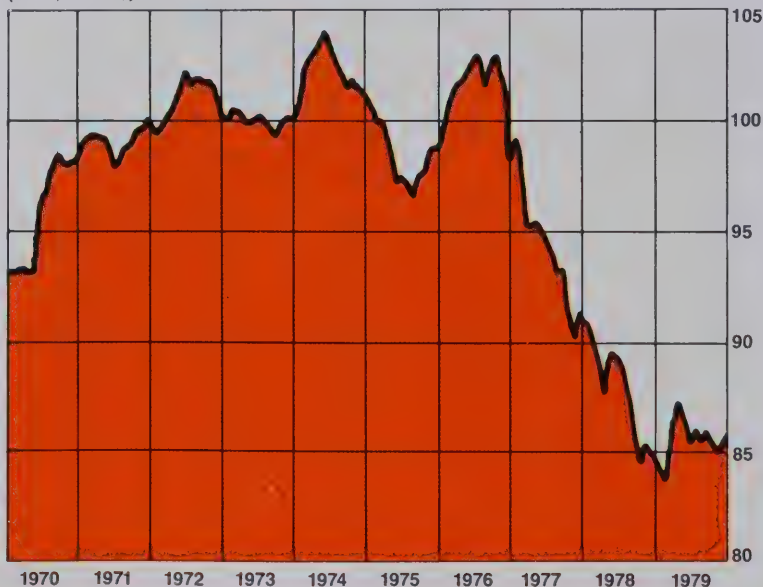
The Company continued active support of employee assistance programs in the areas of alcohol and drug abuse. During the year new co-operative arrangements were made with outside organizations which specialize in assistance to employees.

The Company continued to support post-secondary education for children of employees through its program of higher education awards. In 1979, 54 of these grants went to young people with high scholastic standing to assist them to pursue further studies.

Approximately 7,400 of Cominco's employees are Union members. The Company places great importance on maintaining good industrial relations at its operations and on improving them wherever possible. There has been excellent co-operation from Union officers and members — especially in the area of safety and industrial hygiene.

The safety and industrial health of our employees continued to receive close attention at all of our plants and mines.

Canadian Dollar
Monthly Average of N.Y. Noon Spot Rates
(U.S. ¢/Cdn. \$)



1979 Quarterly Earnings

(Millions)

	1st	2nd	3rd	4th	Year Total
Revenue	\$279.7	\$362.2	\$268.1	\$381.8	\$1,291.8
Costs and expenses	215.1	259.6	191.7	275.6	942.0
Income and resource taxes	24.0	40.4	31.0	37.7	133.1
Minority interests in net earnings of subsidiary companies	4.3	8.4	3.2	7.2	23.1
Earnings before the following	36.3	53.8	42.2	61.3	193.6
Equity in net earnings of associated companies	2.1	1.0	3.1	4.5	10.7
Gains (losses) on translation of accounts of foreign subsidiaries	0.3	0.4	(0.8)	(0.5)	(0.6)
Net earnings	\$ 38.7	\$ 55.2	\$ 44.5	\$ 65.3	\$ 203.7
Earnings per common share	\$ 2.17	\$ 3.13	\$ 2.50	\$ 3.72	\$ 11.52

Safety and on-the-job training programs were intensified during the year. Employees showed a positive interest in working with management to improve the safety and working conditions in our operations.

In 1979 nine labour agreements were negotiated, including those at Trail and Kimberley, covering 6,800 of Cominco's unionized employees. A strike of six weeks occurred at the potash mine in Saskatchewan and one of fourteen weeks at National Hardware. Most major agreements expire in 1981.

The Impact of Inflation

While it is well recognized that inflation erodes the purchasing power of individuals in our society, it may be less apparent to many that inflation similarly affects the purchasing power of corporations. The erosion of corporate financial strength due to inflation is of concern. During the past ten years costs to replace productive capacity or to bring on stream new mines have more than quadrupled. The cost of new mining projects is growing to such proportions that it is taxing the ability of corporations to finance them without jeopardizing their financial integrity. Yet there are segments of our society who will claim that earnings of corporations, particularly in 1979, are excessive. These allegations will be made notwithstanding that it is these earnings which are so critical to corporations if they are to create competitive productive capacity and employment opportunities.

To maintain its competitive position Cominco, at December, 1979, had outstanding commitments for new capital projects of \$344 million, equal to fifty percent of the total shareholder investment to that date. With these commitments and with plans for other projects in excess of \$1 billion during the next several years, Cominco's ability to successfully undertake this massive investment is dependent upon its ability to generate and to maintain a level of earnings similar to those experienced in 1979.

Existing accounting conventions require the reporting of revenues in today's dollars but the reporting of expenditures for major segments of costs, such as inventories, plants and equipment, are in historic dollars and disregard totally the costs of replacement or new productive capacities.

For a mining company, its most valuable assets are its orebodies and the infrastructure and facilities to process the ore. Yet the current value of these assets is not reflected on the balance sheet. In addition, as exploration programs continue the search for as yet undiscovered orebodies, activities are not only centered in more remote geographic locations but also mineralized areas are relatively more difficult to find. This results in an escalation in costs of exploration and development which, when coupled with the effect of inflation, compound the

problem of carrying a mining company's orebodies in historic dollars. No recognition is given to the increasing costs associated with the replacement of this source of earnings.

To indicate the effect of inflation on the Company's production facilities the estimated replacement cost compared to original historical cost is set out below:

	1979 Replacement Estimate (millions)	Historical Cost
Buildings and Equipment	\$3,115	\$807
— Accumulated Depreciation	1,380	308
— Net	\$1,735	\$499
Depreciation for the Year		
— Allowed for Taxation Purposes	44	44
— Not Allowed for Taxation Purposes	60	—
	\$ 104	\$ 44
Net Earnings — Reported		\$204
— Adjusted for Depreciation on Replacement Basis	\$ 143	
Return on Investment		
— Historical		24%
— Adjusted on Replacement Basis	8%	

Various techniques are used to arrive at estimated replacement values. Because of their subjectiveness the estimated replacement values and inflationary effect should be considered as a measure of magnitude only and not as absolute.

Summary of Significant Accounting Policies

The accounts of Cominco Ltd. (the Company) are prepared using generally accepted accounting principles in Canada and on a basis consistent with the previous year. To facilitate review of the consolidated statements contained in this report, the significant accounting policies followed by the Company and its subsidiaries are summarized below.

Principles of Consolidation

The accounts of the Company and its subsidiaries are consolidated in the financial statements. The differences between the cost of the investments and the underlying book values of the assets at the dates of acquisition have been allocated to fixed assets on consolidation and are being amortized accordingly. Inter-company items and transactions between consolidated companies are eliminated.

Investments in associated companies (those companies in which the Company owns 50% or less of the shares and over which it has significant influence) are accounted for by the equity method. Under this method the Company includes in its earnings its share of the earnings or losses of associated companies. In measuring the Company's share of earnings or losses, amortization of differences between the cost of the investments and underlying book values are taken into account.

Foreign Currency Translation

The accounts of foreign subsidiaries are translated into Canadian dollars. Accounts included in the consolidated statement of earnings, except product inventories, depreciation and depletion, are translated at the weighted average rates of exchange prevailing during the year. Product inventories, depreciation and depletion are translated at the rates in effect when the related expenditures are made. Accounts included in the consolidated balance sheet are translated at rates of

exchange in effect at the end of the year, except that: a) inventories, investments, fixed assets and accumulated depreciation and depletion are at rates at dates of acquisition; b) deferred income taxes and retained earnings are at rates at dates of origin; and c) debts not maturing within one year and share capital are at rates at dates of issue. The resulting translation adjustments are included in the determination of consolidated earnings.

Inventories

Finished goods, raw materials and partially processed materials are valued generally at the lower of cost (determined on the monthly average method) and net realizable value. Cost of certain inventories in the United States is determined on a last-in, first-out basis. Stores and operating supplies are valued at average cost less appropriate allowances for obsolescence.

Land, Buildings and Equipment

Land, buildings and equipment are recorded at cost and include the cost of renewals and betterments. When assets are sold or abandoned, the recorded costs and related accumulated depreciation are removed from the accounts and any gains or losses are included in earnings. Repairs and maintenance are charged against earnings as incurred.

Depreciation is calculated on the straight-line method using rates based on the estimated service lives of the respective assets. In some integrated mining and manufacturing operations, assets are pooled and depreciated at composite rates. Depreciation is not provided on major additions until commencement of commercial production.

Mineral Properties and Development

Expenditures on general mineral exploration are charged against earnings as incurred. Expenditures to investigate identified properties and to develop new mines are capitalized as mineral properties and development. Due to the uncertainty of the final out-

come, expenditures on investigation together with the cost of certain investments in mineral companies are amortized against earnings by charges for depletion. Abandoned properties are charged against earnings in the year of abandonment. Depletion on operating mines is provided on a units-of-production or on a time basis related to the mineral reserves position.

Taxes on Income

Income tax laws in Canada and in some other countries permit the deduction of depreciation and other items from income to determine taxable income at times which do not coincide with those used for financial reporting purposes. These differences in timing of deductions result in taxes being provided which are not currently payable.

Tax savings from investment tax credits are reflected in earnings as they are realized.

Withholding taxes, where applicable, on earnings of foreign operations are provided in the accounts to the extent of dividends anticipated in the future.

Research and Product Development

Research and product development costs are charged against earnings as incurred.

Earnings per Share

Earnings per common share are calculated by dividing net earnings less preferred dividends paid and accrued, by the average number of shares outstanding during the year.

Consolidated Statement of Earnings

Year ended December 31, 1979

	1979	1978
	(thousands)	
Revenue		
Sales of products and services	\$1,273,903	\$901,177
Income from investments	17,858	7,062
	1,291,761	908,239
Costs and Expenses		
Cost of products and services	676,606	559,739
Distribution	101,135	97,382
Selling	22,703	21,180
General and administrative	33,586	30,547
General mineral exploration	10,489	6,903
Long-term debt interest and expense	24,950	25,534
Depreciation, depletion and amortization	72,520	64,659
	941,989	805,944
Earnings Before the Following	349,772	102,295
Taxes on income including resource taxes (Note 7)		
Current	103,816	35,571
Not currently payable	29,269	8,406
	133,085	43,977
	216,687	58,318
Minority interests in net earnings of subsidiary companies	23,088	6,072
	193,599	52,246
Equity in net earnings of associated companies	10,670	9,470
Gain (loss) on translation of accounts of foreign subsidiaries	(618)	3,496
Earnings Before Extraordinary Item	203,651	65,212
Extraordinary item	—	2,159
Net Earnings	\$ 203,651	\$ 67,371
Earnings Per Common Share		
Earnings before extraordinary item	\$ 11.52	\$ 3.46
Net earnings	\$ 11.52	\$ 3.59

Consolidated Statement of Earnings Reinvested in the Business

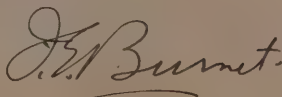
Year ended December 31, 1979

	1979	1978
	(thousands)	
Amount at Beginning of Year		
As previously reported	\$ 423,304	\$397,969
Adjustment of Saskatchewan resource taxes (Note 7)	6,922	4,745
As restated	430,226	402,714
Net earnings	203,651	67,371
	633,877	470,085
Deduct		
Costs incurred on issue of preferred shares	—	272
Dividends paid		
Preferred — Series A \$2.00 per share	4,000	4,000
— Series C \$1.71 per share (1978 - \$0.80)	3,418	1,594
Common \$4.75 per share (1978 — \$2.00)	80,905	33,993
	88,323	39,859
Amount at End of Year	\$ 545,554	\$430,226

Consolidated Balance Sheet at December 31, 1979

	1979	1978
	(thousands)	
ASSETS		
Current Assets		
Cash and short-term investments	\$ 92,706	\$ 61,769
Accounts receivable	188,967	128,234
Inventories (Note 2)	274,055	190,289
Prepaid expenses	3,982	7,344
	559,710	387,636
Investments (Note 3)		
Associated companies	73,701	67,142
Other companies	78,302	80,314
	152,003	147,456
Fixed Assets		
Land, buildings and equipment	889,216	782,827
Less accumulated depreciation	354,869	315,177
	534,347	467,650
Mineral properties and development	196,339	171,548
Less accumulated depletion	85,217	74,901
	111,122	96,647
	645,469	564,297
Other Assets (Note 4)	13,999	13,521
	\$1,371,181	\$1,112,910
LIABILITIES AND SHAREHOLDERS' EQUITY		
Current Liabilities		
Bank loans	\$ 34,073	\$ 23,360
Accounts payable and accrued liabilities	160,617	107,838
Income and resource taxes (Note 7)	86,642	29,559
Long-term debt due within one year	8,748	18,808
	290,080	179,565
Long-Term Debt (Note 5)	226,000	234,894
Income Taxes Provided but not		
Currently Payable	119,618	92,082
Minority Interests	54,795	42,370
Shareholders' Equity		
Capital (Note 6)	135,134	133,773
Earnings reinvested in the business	545,554	430,226
	680,688	563,999
Commitments and Contingent Liabilities (Note 8)		
	\$1,371,181	\$1,112,910

Approved by the Board:

 DIRECTOR

 DIRECTOR

Consolidated Statement of Changes in Financial Position

Year ended December 31, 1979

	1979	1978
	(thousands)	
Source of Funds		
Funds provided from operations	\$323,875	\$142,154
Proceeds from disposal of land, buildings, equipment and investments	4,201	4,951
Additional long-term debt	4,200	4,250
Proceeds from issue of share capital		
— preferred	—	50,000
— common	1,432	60
Proceeds from settlement of potash flood claim	—	7,800
Repayment of advances to an associated company	—	5,600
	\$333,708	\$214,815
Application of Funds		
Land, buildings and equipment	\$114,777	\$ 66,636
Mineral properties and development	35,371	20,801
Loan to Bankeno Mines Limited	3,000	—
Investment in associated companies	1,112	10,265
Investment in other companies	295	772
Repayments on long-term debt	13,094	18,839
Preferred shares purchased for cancellation	71	—
Dividends — to shareholders	88,323	39,587
— to minority shareholders of subsidiary companies	10,577	2,661
Working capital of former subsidiaries removed from the consolidation	1,542	6,967
Other	3,987	3,570
	272,149	170,098
Increase in Working Capital	61,559	44,717
	\$333,708	\$214,815

THORNE RIDDELL

CHARTERED ACCOUNTANTS

Auditors' Report

To the Shareholders of Cominco Ltd.

We have examined the consolidated balance sheet of Cominco Ltd. as at December 31, 1979 and the consolidated statements of earnings, earnings reinvested in the business and changes in financial position for the year then ended. We also examined the statement of segmented information as at December 31, 1979 and for the year then ended. Our examination was made in accordance with generally accepted auditing standards, and accordingly included such tests and other procedures as we considered necessary in the circumstances.

In our opinion, these consolidated financial statements present fairly the financial position of the company as at December 31, 1979 and the results of its operations and the changes in its financial position for the year then ended, and the statement of segmented information presents fairly the information set forth therein, all in accordance with generally accepted accounting principles applied on a basis consistent with that of the preceding year.

Vancouver, Canada
February 7, 1980

Thorne Riddell
Chartered Accountants

Statement of Segmented Information

Year ended December 31, 1979

(Millions)

	By Industry Segment						Consolidated	
	Mining and Integrated Metals		Fertilizers & Chemicals		Other Operations			
	1979	1978	1979	1978	1979	1978	1979	1978
Revenue								
Sales to external customers	\$788.7	\$514.9	\$317.3	\$270.6	\$167.9	\$115.7	\$1,273.9	\$ 901.2
Sales to other segments	32.2	30.7	0.3	0.1	1.6	0.5		
	\$820.9	\$545.6	\$317.6	\$270.7	\$169.5	\$116.2		
Earnings								
Operating profit before income and resource taxes	\$312.1	\$102.3	\$ 50.3	\$ 31.0	\$ 17.9	\$ 5.9	\$ 380.3	\$ 139.2
General mineral exploration							(10.5)	(6.9)
Interest on long-term debt							(25.0)	(25.5)
Corporate (net)							5.0	(4.5)
Income and resource taxes							(133.1)	(44.0)
Earnings before minority interest, gain on translation and equity in earnings of associates							\$ 216.7	\$ 58.3
Identifiable Assets								
Segment assets								
— Operating	\$531.7	\$346.6	\$319.3	\$313.4	\$157.3	\$130.3	\$1,008.3	\$ 790.3
— Undeveloped properties and construction in progress	134.2	104.7	14.0	0.9	3.6	5.7	151.8	111.3
	\$665.9	\$451.3	\$333.3	\$314.3	\$160.9	\$136.0	\$1,160.1	\$ 901.6
Corporate assets							59.1	63.9
Investment in associated and other companies							152.0	147.4
Total Assets							\$1,371.2	\$1,112.9
Depreciation, Depletion and Amortization								
	\$ 40.3	\$ 33.9	\$ 23.4	\$ 23.1	\$ 8.8	\$ 7.7	\$ 72.5	\$ 64.7
Capital Expenditures	\$115.6	\$ 67.0	\$ 18.9	\$ 6.7	\$ 15.6	\$ 13.7	\$ 150.1	\$ 87.4

By Geographic Region

Canada		United States		Other Countries	
1979	1978	1979	1978	1979	1978
\$868.9	\$613.2	\$299.8	\$238.6	\$105.2	\$ 49.4
93.4	81.9	6.6	8.6	—	—
\$962.3	\$695.1	\$306.4	\$247.2	\$105.2	\$ 49.4
\$300.9	\$ 98.9	\$ 44.4	\$ 33.0	\$ 35.0	\$ 7.3
\$775.1	\$588.6	\$105.5	\$ 98.8	\$127.7	\$102.9
118.4	94.1	32.7	15.7	0.7	1.5
\$893.5	\$682.7	\$138.2	\$114.5	\$128.4	\$104.4
\$ 50.4	\$ 48.2	\$ 13.7	\$ 10.1	\$ 8.4	\$ 6.4
\$114.1	\$ 71.5	\$ 31.6	\$ 12.2	\$ 4.4	\$ 3.7

Notes to the Statement of Segmented Information

Year ended December 31, 1979

1. The Company operates in three industry segments:

Mining and Integrated Metals

Principally the mining, processing, smelting, and refining of lead, zinc, silver, and gold into concentrates and refined metal.

Fertilizers and Chemicals

Principally the production of potash, ammonia, urea, phosphates, nitrates and sulphuric acid.

Other Operations

Principally metal products and electric power distribution.

2. Sales to other segments are accounted for at prices which approximate market.
3. Investment income and certain corporate expenditures and assets relating to the overall direction and management of the Company's activities are not allocated to industry segments.
4. Canadian export sales amounted to \$558.2 million (1978: \$404.6 million).
5. Certain of the 1978 figures have been reclassified to conform to the 1979 presentation.

Notes to Consolidated Financial Statements

Year ended December 31, 1979

1. Accounting Policies

The significant accounting policies followed by the Company and its subsidiary companies are summarized under the caption "Summary of Significant Accounting Policies" on page 10.

2. Inventories

	1979	1978
	(thousands)	
Finished goods	\$112,292	\$103,558
Raw materials and partially processed materials	112,030	46,260
Stores and operating supplies ..	49,733	40,471
	\$274,055	\$190,289

3. Investments

	1979	1978
	(thousands)	
Associated companies:		
Shares at cost	\$ 53,055	\$ 51,943
Equity in undistributed earnings ..	20,646	15,199
	\$ 73,701	\$ 67,142
Other companies:		
Shares at cost		
Bethlehem Copper Corporation (39.2% owned)	\$ 41,313	\$ 41,313
Panarctic Oils Ltd. (8.0% owned; 1978 - 8.2%)	18,391	18,391
Tara Exploration and Development Company Limited (17.4% owned)	26,903	26,903
Other companies		
Quoted market value (1979 - \$3,722,000)	3,238	2,915
No quoted market value	1,665	1,971
Other	464	485
	91,974	91,978
Less accumulated depletion of mineral investments	13,672	11,664
	\$ 78,302	\$ 80,314

4. Other Assets

	1979	1978
	(thousands)	
Mortgage receivable on sale of land, due 1981	\$ 3,150	\$ 3,150
Deferred costs, less amounts amortized		
- Debt financing costs	2,682	2,923
- Pre-production costs relating to new fertilizer facilities	—	4,235
Loan to Bankeno Mines Limited ..	3,000	—
Other	5,167	3,213
	\$ 13,999	\$ 13,521

5. Long-Term Debt (excluding amount due within one year)

	1979	1978
	(thousands)	
Cominco Ltd.		
10% Serial Notes due 1982 to 1996, U.S. \$50,000,000	\$ 49,224	\$ 49,224
8½% Sinking Fund debentures due 1991	56,876	58,952
10½% Sinking Fund debentures due 1995	57,610	60,000
Bank loan due 1981 to 1983 with interest related to the Canadian prime bank rate	17,000	21,000
Export Import Bank of the United States 8% loan due 1981 to 1985, U.S. \$6,863,000	6,834	8,353
West Kootenay Power and Light Company, Limited		
5¾% First Mortgage bonds due 1985	6,248	6,458
Bank loan due 1981 bearing interest at ½% above prime bank rate	26,400	22,200
Cominco American Incorporated		
5½% and 6¾% Notes due 1980	—	972
7% Notes due 1981 to 1984, U.S. \$5,370,000	5,800	7,236
Other Companies	8	499
	\$226,000	\$234,894

Payments due in 1980 \$8,748,000; 1981 \$34,217,000; 1982 \$20,115,000; 1983 \$11,111,000; 1984 \$11,111,000.

If translated into Canadian dollars at year-end rates of exchange, long-term debt would increase by \$10,699,000 in 1979 and \$12,476,000 in 1978. This is not necessarily indicative of the amounts which will be repaid when the obligations are retired.

6. Capital

a) Authorized:

Preferred —

8,000,000 Preferred Shares with the par value of \$25 each issuable in series.

Common —

30,000,000 shares of no par value.

	1979	1978
	(thousands)	
b) Issued and fully paid:		
Preferred —		
1,997,150 (1978 — 2,000,000)		
— \$2.00 Tax Deferred Exchangeable Shares Series A (Note 6(e))	\$ 49,929	\$ 50,000
2,000,000 — Floating Rate Preferred Shares Series C	50,000	50,000
	99,929	100,000
Common —		
17,050,003 shares (1978 — 16,999,353)		
(Note 6(d))	35,205	33,773
	\$135,134	\$133,773

c) Preferred Shares:

The Company has constituted the following Preferred Shares:

2,000,000 shares as "\$2.00 Tax Deferred Exchangeable Preferred Shares Series A"

2,000,000 shares as "\$2.4375 Preferred Shares Series B"

2,000,000 shares as "Floating Rate Preferred Shares Series C"

Each Series A Preferred Share is entitled to a fixed cumulative cash dividend of \$2.00 per annum payable semi-annually. The Series A Shares are exchangeable into Series B Preferred Shares after June 1, 1988. Each Series C Preferred Share is entitled to a cumulative cash dividend which is related to the prime rate of interest charged by certain Canadian banks, adjusted quarterly and payable semi-annually. The Series C Shares have a par value of \$25 and the holder may call for retraction on March 31, 1988.

d) Shares issued during the year for cash:

50,650 Common Shares (Note 6(f)) . . . \$1,432,000

e) Shares purchased for cancellation:

During 1979, the Company purchased for cancellation 2,850 Series A Preferred Shares with a par value of \$71,250 for \$71,108 cash.

f) The Company has reserved 200,000 Common Shares for stock option plans in favour of certain executives in the full-time employment of the Company or a subsidiary. To December 31, 1979, options (exercisable within five years of issue) have been granted for 143,650 shares at 90% of the market price on the day of granting the options.

Outstanding options are as follows:

Granted	Price	Outstanding Dec. 31, 1979	Exercised in 1979
1974	\$25.42	nil	5,500
1975	27.45	1,500	11,400
1976	34.99	12,700	8,000
1977	32.63	12,625	8,575
1978	24.41	7,200	17,175
1979	32.40	25,400	—
		59,425	50,650

7. Prior Period Adjustment

During the year, the Company concluded an agreement with the Government of Saskatchewan concerning Prorationing and Reserve Taxes. As a result, a portion of the provisions for taxes for 1974 to 1978 is no longer required. The amounts previously reported have been restated to show a reduction of \$6,922,000. Of this amount, \$2,177,000 (\$0.13 per share) is applicable to 1978; the remaining \$4,745,000 is applicable to previous years. The financial statements have been restated retroactively for these changes.

8. Commitments and Contingent Liabilities

a) The Company and its subsidiaries have pension plans covering substantially all employees. Pension costs for current service are charged to earnings in the year incurred. The liability for past service is being funded and charged to earnings over varying periods up to 15 years. The date of the most recent actuarial evaluation for most pension plans is December 31, 1978. At December 31, 1979, actuarial estimates of the unfunded liability for past service amount to \$89,000,000 of which \$74,000,000 remains to be charged to earnings, \$15,000,000 having been charged to earnings by provisions in 1979 and prior years. The vested portion of the unfunded liability for past service is \$79,000,000.

Total pension expense including past service costs was \$26,411,000 for 1979 and \$16,156,000 for 1978. During 1979, the Company granted increased pensions to retired employees. The estimated total cost of this adjustment, \$6,549,000, has been charged to earnings in the year. In addition, increased benefits were incorporated into certain of the pension plans at an annual cost of \$2,368,000.

b) At December 31, 1979, guarantees and commitments were as follows:

Guarantees \$39,208,000 of which \$28,300,000 was for bank loans of an associated company.

Unexpended amounts remaining on approved major capital projects \$344,000,000.

9. Directors' and Officers' Remuneration

In 1979, total remuneration of \$149,000 was paid to fourteen (all) directors and \$1,173,000 to fifteen (all) officers of the Company, including relatively insignificant amounts paid to them by subsidiaries. There were five officers who were also directors.



Cominco into the 80's

After many months of development planning by Company research and engineering staff Cominco announced in 1977 a multimillion dollar modernization program for the Sullivan mine at Kimberley and the metallurgical plants at Trail, British Columbia. Despite metal markets which at that time lacked obvious promise, the decision was taken to ensure the Company would have a strong position for the 1980's and beyond by harnessing the latest technology — including in-house developed processes — which will increase productivity and provide excellent working conditions.

Already the world's largest lead-zinc production complex, by 1986 the Trail plants' capacity will have grown from 370,000 tons of lead and zinc in 1979 to an output of 500,000 tons of these metals. Renovated plants, combined with modern mining techniques at the Sullivan and other producing mines, will make Cominco a strong competitor in metal markets of the future.

*The Rubiales zinc-lead mine in Spain
began production in 1978.*



Lead and Zinc — A Solid Future

The decision to expand and modernize the Company's lead and zinc plants, and to develop new mines in arctic Canada and in Australia, was based on an analysis and projection of world supply and demand trends. A curtailment of exploration for minerals and slow growth in lead mine capacity by the industry during the 1970's is likely to result in tight supply during the 1980's. Lead and zinc consumption is expected to double in the next twenty years and to meet this demand by the turn of the century the world will need an additional seventy new mines of the capacity of Cominco's new Polariss mine in the Canadian High Arctic. Cominco's continuing commitment to

exploration costing over \$30 million per year will enable it to meet a portion of this demand as it arises. Early in 1980 diamond drilling near the northern boundary of the Pine Point property has increased the metal content of that company's reserves by 25 percent. Cominco has the reserves and potential reserves in Canada and other parts of the world to assure its customers of a continuing supply of its metal products.

Cominco is preparing for the years ahead. Lead and zinc deposits in Tasmania and the Canadian High Arctic will be in production in the early 1980's. Modernization and expansion of lead and zinc mining and processing capabilities at Kimberley and Trail demonstrate the Company's intention of participating fully in the growing demand for metals in the 80's and beyond.

Trackless Mining at Sullivan

Modernization of the Sullivan mine started in 1977 and by 1979 twenty percent of the 2.4 million tons of ore mined was produced by mechanized mining methods. By 1982, eighty percent of annual ore extraction will be mined by these systems.

Gone are the days when only ore cars on rails travelled through the Sullivan mine. Today, some tunnels have been stripped of their rails, and rubber-tired drill jumbos, scoop trams and underground haulage trucks increase the mine's daily tonnage output and over-all efficiency. A ramp, driven from the surface of an open pit, inclines down to the underground working levels providing access for mechanized mining equipment. Some distance away near the entrance to a second ramp, a new office building and a change house are being built.



A modern scoop tram loading ore in the Sullivan mine at Kimberley, B.C.



A rubber tired jumbo drill with three 20-foot booms is part of the mechanization mining program at the Sullivan mine.

Trail — New Plants for Old

The first major units in the Trail program were in the lead operations. A new continuous dropping furnace was completed in 1978; a \$26 million feed plant was completed last summer. The feed plant, with storage for 20,000 tons of lead concentrate, has computerized controlled mixing of the concentrates and fluxes used in preparing charge material for the lead blast furnaces.

Now under study is the possible use of a new "flash smelting" method for lead which may be incorporated into the rebuilding of the smelter. A decision on the feasibility of the process for inclusion in the modernization program will be made by the end of 1981. The rebuilding of the lead smelter, scheduled for completion by 1985, is aimed at increasing annual output from 160,000 to 200,000 tons.

The largest single project at Trail is a new \$210 million plant to process zinc concentrate into high analysis electrolytically refined zinc in its various marketable shapes, sizes and alloys. This huge facility, 1,050 feet long, will replace three existing electrolytic plants and zinc melting and casting operations. With start-up scheduled for 1981, and using unique "jumbo" electrolytic cells redesigned by Cominco engineers, this plant will produce 300,000 tons of zinc annually.

Modernization of the Trail metallurgical complex includes the world's first zinc pressure leaching plant and a new electrolytic and melting operation in a building longer than three football fields.

The zinc pressure leaching plant uses new technology to separate sulphur from zinc sulphide concentrate by chemical (hydrometallurgical) rather than roasting (pyrometallurgical) methods. The first pressure leach reaction vessel (autoclave) has been installed in the plant and will be the heart of the operation. Close study of this vessel will set process guidelines before installation of a second autoclave. This plant, the first stage to cost



A continuous dropping furnace was the first step in the modernization of lead production.

approximately \$19 million, will be the first zinc plant in the world to use hydrometallurgical sulphur removal on a commercial scale and will go into operation in 1981. In 1983, after the second autoclave is installed, this process will contribute 70,000 tons to the annual total of 300,000 tons of zinc production.



Jumbo electrolytic cells which will be used in new Zinc Electrolytic and Melting Plant.



The first autoclave for the Zinc Pressure Leaching Plant at the plant site in the summer of 1979.



Precast concrete sections were used for the main part of the Lead Smelter Feed Plant. INSERT: Inside the Feed Plant, concentrates are distributed to the bins via the conveyor at right; trucked material arrives at lower left.



The \$210 million Zinc Electrolytic and Melting Plant under construction. The largest single project in the overall modernization-expansion program at Trail, the plant will replace three existing electrolytic plants and zinc melting and casting operations.

Polaris — Mining on Top of the World

In 1982, production will begin from Cominco's Polaris lead-zinc mine on Little Cornwallis Island in the Canadian High Arctic. Only 90 miles southeast of the magnetic north pole at 75 degrees North Latitude, Polaris will be the most northerly mine in the world.

Polaris' mill, power and service

facilities will arrive at the mine ready made. Now under construction in southern Canada on a 100' x 400' barge, they will be towed to Little Cornwallis Island and floated into a prepared permanent position. Concentrate handling and storage facilities will be constructed on-site.

Housing, recreation and dining structures for some 250 employees will also be pre-cut and assembled on-site and special arrangements for amenities, such as satellite television reception, will be provided.

Cominco began developing the Polaris deposit in late 1979. The pro-



Artist's rendering of the Polaris project on Little Cornwallis Island in the Canadian High Arctic. When this zinc-lead mine starts production in 1982 it will be the most northerly mine in the world.

ject is scheduled to be in production by early 1982 and will produce 187,000 tons of zinc and 42,000 tons of lead concentrates annually. Estimated ore reserves of 25 million tons (14.1 percent zinc, 4.3 percent lead) will allow the mine to operate at a rate of 2,200 tons per day into the next century.

Concentrates will be shipped in Canadian ice-strengthened vessels. Contracts have been signed for the treatment and sale of the mine's output.

Recognizing the unusual responsibilities entailed in northern development, Cominco has been working for several years with Settlement Councils of local residents in the north with the objective of bringing the most beneficial results to northern residents from this project. The experience and knowledge gained through continued liaison and cooperative effort during development of the Black Angel mine in Greenland several years ago has been of great value. Polaris will employ as many native persons as possible, and will provide ample opportunity for their participation including extensive training programs in the techniques of modern mining.

Que River — Mining Down Under

Production from the zinc-lead-silver deposit will begin at the Que River mine in Northwest Tasmania in 1981. The mine is being developed by Aberfoyle Limited, an Australian company owned 47 percent by Cominco. A ten year contract for delivery of up to 250,000 tons annually of Que River ore has been negotiated with Electrolytic Zinc Company of Australasia Limited. The ore will be milled at that company's concentrator at Rosebery, about 24 miles from the Que River mine.



Headframe for the Que River zinc-lead-silver mine in Northwest Tasmania. Being developed by Aberfoyle Limited, the mine will be in production in 1981.



In 1968, Cominco American brought the Magmont lead mine in Missouri into production. The Magmont system is being extended into a new 7,500 acre property called "Magmont West". This new ore body will extend the life of the mine several years.



A new urea plant (left centre) adjacent to Cominco American's ammonia plant at Borger, Texas, will use 48,000 tons of ammonia annually in the production of 85,000 tons of urea.

Cominco American — Building for the Future

In the United States, two projects are under way: an extension to the Magmont lead-zinc-copper mine in Missouri, and a new 85,000 ton urea plant in Texas.

"Magmont West"

The Magmont mine system is being extended into a new 7,500 acre property adjoining the mine by way of "drifting" from the existing underground workings and drilling a number of ventilation shafts. Diamond drills are now at work on the surface of the new property to extend the known ore reserves. Production from "Magmont West" will be integrated with existing mine production, beginning in 1983. The ore will be hoisted to the surface through the present production shaft. This new ore body will extend the life of the mine several years.

Borger Urea Plant

Adjacent to its ammonia plant at Borger, Texas, Cominco American is building a new urea plant which will annually use 48,000 tons of ammonia in the production of 85,000 tons of urea. On-site storage capacity to hold up to 18,000 tons of the product is already in place.

Although the plant is designed to produce feed grade urea for cattle, built-in versatility will allow the entire production to be "prilled" for cattle feed or granulated for use as fertilizer. Adding the new urea plant will permit greater control of ammonia inventory as well as improve the system's over-all flexibility to meet market requirements.



\$10 million Drainage Water Treatment Plant at Kimberley removes metallics from drainage water out of the Sullivan mine and concentrator tailing ponds and discharges clear water into the Kootenay River system.



The new 30 cubic yard "walking" dragline at the Pine Point zinc-lead mine dwarfs every machine on the property, including this large tractor.

Other Improvements

Several other Cominco operations are being improved by the addition of new equipment to reduce costs, conserve energy and increase productivity. At Pine Point in the Northwest Territories a new 30 cubic yard "walking" dragline has reduced the cost of removing overburden. A \$6 million modernization of the Pine Point concentrator flotation circuits will increase metal recovery and lower energy consumption.

Western Canada Steel's Vancouver plant is undertaking a \$6.5 million modernization program that includes a continuous casting machine. When completed in the spring of 1981, the new equipment will increase the plant's ingot capacity by 50 percent.

Even though there are a number of significant projects in progress at this time this should not be taken as a flurry of activity warranted by the promise of the 1980's. The Company has for a number of years been reinforcing its productive base. Among these the 250 foot high headframe housing the hoist mechanism for the 5,400 foot deep Robertson shaft at the Con mine in Yellowknife, completed in 1977, is now becoming a familiar landmark in Canada's north. This \$20 million project has fulfilled expectations of in-

creased efficiency. Through its continuing exploration program, the Company has at least four ore bodies waiting for development — Valley Copper and Bathurst Norsemes in Canada, La Troya in Spain and Mataiva in French Polynesia.

Environment — We Live Here Too

Cominco takes its environmental responsibilities seriously. The maintenance of a clean and safe working environment remains a priority at all operations — as does the protection of the environment that surrounds the mines and plants.

The modern processing plants now under construction at Trail demonstrate the Cominco commitment to environmental protection. More than \$60 million of the projected \$425 million expenditure on modernization is directly aimed at improving the work place and the environment in which operations are located.

At Kimberley, a \$10 million waste water treatment plant went into service in 1979, removing metallics from drainage water out of the Sullivan mine and concentrator tailing ponds, and discharging clean water into the Kootenay River system. A similar plant was into the first stage of construction at Trail in late 1979.



The 250 foot headframe of the Con gold mine is becoming a familiar landmark in Canada's North. Housing the hoisting mechanism for the 5,400 foot deep Robertson shaft, it provides an impressive addition to the skyline of the City of Yellowknife.

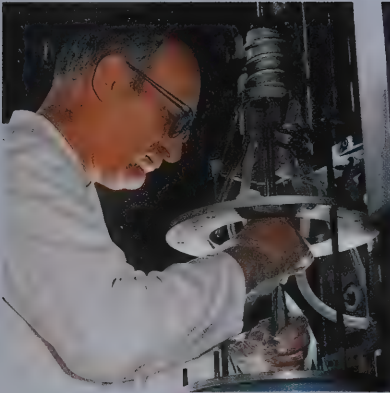
*Rubber tired bucket type loader dumps broken ore
through ore pass to lower haulage levels of the Con mine.*





Making Our Future Work

For almost 75 years, Cominco has based its growth on sound business planning and on applying the most modern technology available. The Company has steadily developed into a major participant in the world mining and processing community. Since its earliest days the objective has been to build a wide and diversified operational base. This combination of strength and flexibility has served the Company well for over seven decades. Cominco's current modernization and expansion program will enable the Company to enter the new decade well equipped for continued growth and prosperity.



A wide range of skills complement the work performed in the Company's mines, metallurgical and chemical operations. Shown here are (top left) a researcher "pulling" indium crystals, (bottom left) a laboratory assistant weighing a sample in the Pure Metals plant, (above) an office employee admiring flowers growing beside a chemical fertilizer plant, (top right) a surveyor employed on modernization program and (bottom right) a welder working on the Robertson Shaft at Yellowknife.

Principal Subsidiaries and Associated Companies

		Cominco Ownership		Head Office
The Canada Metal Company Limited		50%	D. F. Hutton <i>President and Chief Executive Officer</i>	Toronto, Ontario
Cominco American Incorporated		100%	L. D. Demand <i>President and Chief Executive Officer</i>	Spokane Washington, U.S.A.
Cominco Australian Pty. Ltd.		100%	G. N. Moore <i>Chairman</i>	Sydney Australia
Aberfoyle Limited		47%	N. A. Gilberthorpe <i>Chairman and Chief Executive Officer</i>	Melbourne Australia
Cominco Binani Zinc Limited		40%	G. Binani <i>Chairman</i>	Calcutta India
Cominco Holdings N.V.		100%	J.C. Beck A. J. van der Marel <i>Managing Directors</i>	Amsterdam Netherlands
Cominco Europe Limited		100%	P. Hansen <i>President and Chief Executive Officer</i>	London England
Exploración Minera Internacional España S.A. (Exminesa)		47%	F. Prugger <i>Managing Director</i>	Villafranca del Bierzo Spain
Cominco GmbH		100%	R. J. Arend <i>Managing Director</i>	Dusseldorf Federal Republic of Germany
Cominco (U.K.) Limited		100%	D. M. Silver <i>Managing Director</i>	London England
Mazak Limited		50%	R. P. Wilson <i>Chairman and Managing Director</i>	Bristol England
Fording Coal Limited		40%	J. H. Morrish <i>President and Chief Executive Officer</i>	Calgary Alberta
Mitsubishi Cominco Smelting Company Limited		45%	T. Nagano <i>President</i>	Tokyo Japan
National Hardware Specialties Limited		99%	M. C. D. Hobbs <i>Chairman</i>	Dresden Ontario
Pacific Coast Terminals Co. Ltd.		78%	W. W. Brown <i>President and Chief Executive Officer</i>	New Westminster British Columbia
Pine Point Mines Limited		69%	R. P. Douglas <i>President and Chief Executive Officer</i>	Pine Point N.W.T.
Valley Copper Mines Limited (N.P.L.)		82%	R. P. Taylor <i>President</i>	Vancouver British Columbia
Vestgron Mines Limited		63%	O. E. Owens <i>President</i>	Yellowknife N.W.T.
Greenex A/S		63%	E. Sprunk-Jansen <i>Managing Director</i>	Umanak Greenland
Western Canada Steel Limited		100%	M. C. D. Hobbs <i>Chairman and Chief Executive Officer</i>	Vancouver British Columbia
Hawaiian Western Steel Limited		51%	G. W. Hogue <i>General Manager</i>	Ewa Hawaii
West Kootenay Power and Light Company, Limited	Common Preferred	100% 30%	H. M. Lewis <i>President and Chief Executive Officer</i>	Trail British Columbia

Principal Offices

Head Office	200 Granville Street, Vancouver, British Columbia V6C 2R2
Group Offices	Canada Vancouver, British Columbia Trail, British Columbia Calgary, Alberta Yellowknife, Northwest Territories Europe London, England
Research Centres	Trail, British Columbia Sheridan Park, Ontario
Sales Offices	
CANADA	Cominco Ltd. Vancouver, British Columbia Toronto, Ontario Calgary, Alberta Winnipeg, Manitoba
U.S.A.	Cominco American Incorporated Spokane, Washington Chicago, Illinois Fargo, North Dakota Minneapolis, Minnesota Lincoln, Nebraska
EUROPE	Cominco (U.K.) Limited London, England Manchester, England Glasgow, Scotland Cominco GmbH Dusseldorf, Federal Republic of Germany
Exploration Offices	
CANADA	Cominco Ltd. Vancouver, British Columbia Toronto, Ontario
U.S.A.	Cominco American Incorporated Spokane, Washington
EUROPE	Cominco S.A. Brussels, Belgium Cominco France S.A. Paris, France Cominco Italia SpA Rome, Italy
AUSTRALIA	Aberfoyle Limited Melbourne
MEXICO	Compañía Minera Constelación S.A. de C.V. Mexico City
BRAZIL	Mineração Cominco Ltda. Rio de Janeiro

Operating Mines

Aberfoyle — Tasmania
Ardlethan — New South Wales
Black Angel — Greenland
Cleveland — Tasmania
Con — Northwest Territories
Fording Coal — British Columbia
Magmont — Missouri
Pine Point — Northwest Territories
Rubiales — Spain
Sullivan — British Columbia
Vade — Saskatchewan
Warm Springs — Montana

Metal Production

Cominco Ltd. — British Columbia
Cominco Binani Zinc Limited — India
Hawaiian Western Steel Limited — Hawaii
Mazak Limited — England
Mitsubishi Cominco Smelting Company Limited — Japan
Western Canada Steel Limited — British Columbia; Alberta

Metal Fabrication

The Canada Metal Company Limited
Quebec
Ontario
Manitoba
Alberta
British Columbia
Cominco American Incorporated — Washington
National Hardware Specialties Limited — Ontario
Western Canada Steel — British Columbia

Chemical and Fertilizer Production

Cominco Ltd. — British Columbia; Alberta
Cominco American Incorporated —
Nebraska; Texas
Cominco Binani Zinc Limited — India

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Cominco Ltd., Toronto

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†*D. R. McMASTER, Q.C.
Partner
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Montreal

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Corporate Director
Montreal

*I. D. SINCLAIR, Q.C.
Chairman and Chief Executive Officer
Canadian Pacific Limited, Montreal

W. J. STENASON
President
Canadian Pacific Investments Limited
Montreal

*Members of Executive Committee

†Members of Audit Committee

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Chairman of the Company

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Executive Vice-President, Toronto

W. G. WILSON
Executive Vice-President, Vancouver

I. D. SINCLAIR, Q.C.
Vice-President

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Group Vice-President at Yellowknife

A. V. MARCOLIN
Group Vice-President at Trail

S. M. ROTHMAN
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J. F. ALLISON
Vice-President, Employee Relations

K. H. SPURR
Vice-President, Metal Sales

O.E. OWENS
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R. R. STONE
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A. D. MILLER
Comptroller

P. A. MANSON
General Counsel

P.C. STEWART
Secretary

